

DOCUMENT RESUME

ED 052 357

VT 013 472

TITLE Project to Plan, Develop, Present, and Evaluate a Management Institute for Experienced Occupational Education and Manpower Training Administrators. Final Report.

INSTITUTION Technology Management, Inc., Cambridge, Mass.

SPONS AGENCY Department of Health, Education, and Welfare, Washington, D.C.; Massachusetts State Dept. of Education, Boston.

PUB DATE Apr 71

NOTE 138p.

EDRS PRICE EDRS Price MF-\$0.65 HC-\$6.58

DESCRIPTORS Decision Making Skills, *Educational Administration, Experimental Programs, *Institutes (Training Programs), *Management Development, *Manpower Development, Program Administration, *Vocational Education

ABSTRACT

This report concludes the final phase of a project designed to help occupational and manpower training administrators apply the best available management concepts to the analysis and solution of a wide variety of problems. This 2-week experimental institute was presented to a group of Massachusetts administrators from such organizations as public vocational-technical schools, manpower training programs, community colleges, and Commonwealth agencies. Arranged in five chapters, the report provides: (1) an introduction to the organization of the report, (2) background information concerning the project, (3) an evaluation of the project which includes participants and staff observations, (4) 12 recommendations in regard to improving the effectiveness of the Institute, and (5) a proposed design for future institutes. Included in the appendix are the Project Plan, the Institute Prospectus and Schedule, and the Institute Bibliography. (Author/BH)

ED052357

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FINAL REPORT

OF A

PROJECT TO PLAN, DEVELOP, PRESENT,
AND EVALUATE A MANAGEMENT INSTITUTE FOR
EXPERIENCED OCCUPATIONAL EDUCATION AND
MANPOWER TRAINING ADMINISTRATORS.

Performed by

TECHNOLOGY MANAGEMENT INCORPORATED
One Broadway
Cambridge, Massachusetts

Under Contract To

DIVISION OF OCCUPATIONAL EDUCATION
Department of Education
Commonwealth of Massachusetts

APRIL 1971

This contract is in support of a project defined
in the Massachusetts State Plan pursuant to Part F,
Section 553, of the Education Professions Develop-
ment Act. It is financially supported, in part,
by the United States Department of Health, Educa-
tion, and Welfare.

VT013472

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I. INTRODUCTION

This report concludes the final phase of a project to plan, develop, present, and evaluate a Management Institute for Experienced Occupational Education and Manpower Training Administrators.¹ The project was performed by Technology Management Incorporated (TMI) of Cambridge, Massachusetts, under contract to the Commonwealth of Massachusetts Division of Occupational Education.² It was financially supported, in part, by a grant from the Office of Education of the U.S. Department of Health, Education, and Welfare in accordance with the Massachusetts State Plan pursuant to Part F, Section 553, of the Education Professions Development Act.

The 2-week experimental Institute was presented in Danvers, Massachusetts, during the weeks of January 10 to 15 and January 25 to 29, 1971, to a group of Massachusetts administrators from several types of organizations: public vocational/technical schools, manpower training programs, community colleges, and Commonwealth agencies concerned with occupational education and manpower training. The overall project, of which the Institute presentation was the focal event, was initiated in August 1970 and concluded in April 1971 with this report.

The report summarizes important aspects of the project and the Institute and presents conclusions and recommendations concerning the conduct of similar training institutes in the future. The Institute has also been referred to as a "mid-career institute for occupational education administrators" and a "training technique for occupational education administrators" in previous contractual and reporting documents. The title used in this report is that which was actually employed in Institute solicitation and presentation.

¹Referred to in the remainder of this report as "the Institute."

²Referred to in the remainder of this report as "the Division."

Organization of the Report

This report is organized in five parts. This introduction provides basic information to orient the reader and summarizes the major recommendations that TMI developed concerning this type of training for occupational education administrators. Chapter II, "Description," briefly discusses the history of the project, including some important problems and changes characterizing the phases of the project preceding Institute presentation. It describes, in greater detail, the design and characteristics of the Institute presented in the pilot session, but does not discuss the actual presentation.

Chapter III, "Evaluation," discusses the evaluations made and some of the conclusions reached by both instructors and participants during and after the Institute presentation. It also explains the evaluation methodology and describes pertinent activities and events which occurred during the Institute presentation.

Chapter IV, "Recommendations," addresses the future application of the Institute, both as presented in the pilot session and with desirable modifications. It summarizes many of the conclusions and criticisms expressed in Chapter III in the context of recommendations and adds other recommendations based on TMI's experience during the project as a whole and on the instructors' experiences in other training programs. Chapter V, "Proposed Institute Design," presents a specific integrated recommendation for future institutes which is compatible with the several, separate recommendations offered in Chapter IV.

Summary of Recommendations

Based on the experience gained in the Institute development, presentation, and evaluation, TMI recommends the following:

1. Problem/action-oriented management training having a broad and systematic focus on the job of the administrator in a changing environment is needed.
2. The means employed to improve organizational effectiveness (the ultimate objective) should be training aimed at building the capabilities of

the management team within these organizations, rather than training focused only on improvement in top administrators' capabilities.

3. New approaches, supplementing the preparation by each participant of a plan of action, should be employed to ensure that the training has both immediate and continuing impact on participating organizations.
4. Training should be provided to current and potential second echelon administrators within each participating organization as well as to top administrators.
5. Some training should continue to be directed toward the unique needs of top administrators, with participation restricted to top administrators.
6. The mix of participants in the Institute's target population should comprise a narrower range in terms of the types of organizations and programs to enable greater emphasis on specific problems and common organizational environments.
7. The Institute should be more adaptable to the varying needs of the participants and to the goals and programs of State and Federal Government leaders.
8. The Institute should play a "facilitating" rather than "initiating" role in serving the specific needs of priority populations (disadvantaged and handicapped).
9. The amount of overall training provided, in relation to the time spent by participants in formal training sessions, should be increased through expanded use of both advance preparation materials and post-session assignments and followup.
10. The training cost per participant should be reduced by increasing the number of participants attending sessions which cover certain types of subject matter (i.e., subjects suited to treatment in the lecture/general discussion mode).

11. New means should be employed to stimulate interest and advance commitment from prospective participants.
12. The overall lesson plan and instructional methodology should be modified to focus more effectively on problems and action and to strengthen the development of an integrated concept of management.

TMI's proposed design for future institutes incorporates the above recommendations and emphasizes TMI's conclusion that the ultimate objective of improved organizational effectiveness can be best served by a significantly different approach than was used in the pilot session. Specifically, the proposed design, titled the Institute for Management and Organizational Development, aims at building the capability of a management team, rather than at improving the capability of only the top administrator. Its strategy seeks improved adaptability to specific organizational needs and greater post-training impact on organizational and administrator behavior by a 3-part approach:

- . a 4-day unit for top administrators;
- . a series of 15 to 25 elective Management Development Modules, 1/2 to 3 days each, which address specific management subjects and skills pertinent to top administrators, second echelon administrators, or both, to be conducted over a 2- to 4-month period; and
- . a 1-day organizational unit, which brings together the top administrator and other participating administrators from each organization, with perhaps 3 to 5 organizations represented at each session.

It should be noted that the pilot session conducted in January was effective as judged by instructors and participants. Future application of that design would be worthwhile, and its effectiveness would be increased as a result of lessons learned during the presentation of the pilot session. TMI's recommendation of a new design for future institutes reflects an evaluation that the new design is superior to the current design, but does not imply that future application of the current design should not be undertaken.

II. DESCRIPTION

This chapter focuses on the major issues and problems encountered in planning and developing the Institute, the resolutions to these issues and problems, and the general design of the pilot session conducted in January 1971.

Background

Some familiarity with the project's history is helpful in understanding the issues, problems, and decisions that were involved in Institute development.

The initial idea for the project was conceived approximately two years before the project was formally started, and the proposal was under review for nearly a year prior to initiation. During this period, many individuals from numerous organizations and disciplines contributed to the initial specification of the Institute and to its emphasis and outcomes. A consequence of these cumulative contributions was an initially "overspecified" project and Institute; i.e., a series of objectives, participant characteristics, subjects, and methodologies were specified which, taken together, were inconsistent or incompatible in many aspects.

A further consequence of the delay in processing the proposal was the change in timing of the Institute presentation from early Fall 1970 to January 1971. Thus a 2-week Institute was scheduled during a period exceptionally busy for most occupational education administrators, rather than during a slack period as initially planned.

In addition, administrative changes in the Commonwealth's Division of Occupational Education created some uncertainties and necessitated several planning adjustments during development of the Institute. In late August 1970, during the summer preceding project initiation, the Associate Commissioner in charge of the Division retired and the Education Professions Development Act (EPDA) director left. The new Associate Commissioner did not take office until early December, only a month before the Institute presentation, and the task of EPDA direction was added to the responsibilities of another staff member who, in an understaffed agency, had responsibilities in many other areas as well. As a result of these administrative difficulties, TMI found it necessary both to assume responsibility for tasks not initially specified and to postpone development of, and eventually eliminate, certain aspects of the Institute design.

The specific changes resulting from these factors are described in the following sections in terms of the planning, development, final design, and presentation of the Institute.

Planning

The initial project plan, required as part of the contract specification, is included as Appendix A. While the tasks performed and their sequence remained basically the same as stated in the plan, several minor and major changes were made as work progressed.

Minor changes included matters such as a shift in the Institute presentation schedule from the first and third to the second and fourth weeks of January and consequent shifts in evaluation and reporting schedules; additional interviews with members of the target population and subsequent postponement of the questionnaire mailing; and an earlier concentration on preliminary design and materials preparation tasks than initially planned. Major changes included TMI's assumption of responsibility for facility arrangements and participant solicitation.

Of these changes, the most substantial was participant solicitation. Under the contract, the Division had the responsibility for soliciting and providing Institute participants. TMI and the Division mutually agreed that obtaining participants who had the appropriate authority and competence (i.e., top administrators) was critical to both the design and the effective presentation of the Institute. During TMI's early interviews with the administrators, it became apparent that some difficulty might be experienced in obtaining their commitment to attend the 2-week Institute in January and that the solicitation effort would need more attention than was initially planned. The Division's workload and staffing conditions, however, limited the amount of time that could be spent on this effort. Consequently, TMI agreed to assist the Division in carrying out its responsibility to provide participants by undertaking several tasks beyond those specified in the original project plan.

Specifically, TMI interviewed a sample of prospective participants to determine their receptivity to the Institute's content and timing. Responses were sufficiently positive to warrant proceeding with the development of a solicitation package and a list of administrators to be

invited. TMI prepared, reproduced, and mailed letters of invitation from the Division of Occupational Education and from TMI (see Appendix B) and a prospectus describing the Institute (see Appendix C).

Development

The primary challenge during Institute development was selecting, from among many, those specifications which:

- . were consistent with major objectives and with one another;
- . would collectively form a strong theme that, in turn, would produce significant impact on participant behavior; and
- . were realistic in scope and content, given a 2-week maximum duration of training.

While both the Institute as a whole and its specific design elements were experimental in nature, the Division and TMI shared the desire to produce immediate and continuing impact on the participants.

A description of the changes in objectives during Institute development indicates how design elements were reshaped to produce a coherent overall design. The remainder of this section, therefore, examines three sets of objective statements and some of the factors which led to modifications. Specifically, these sets include the objectives in the contractual specification and in a letter modification to the contract, and the objectives formulated in the preliminary design.

The final design unit objectives are stated in the following section.

The objectives initially stated in the contractual specification are listed below:

- ". To clarify the necessity for effective planning of occupational education in response to rapidly advancing technologies;

- . To emphasize the program needs of the disadvantaged and handicapped in today's changing industrial and social environment;
- . To acquaint the participants with the new and developing legal and policy environments created by state and national governments, particularly with respect to priority populations;
- . To familiarize participants with some of the new tools and techniques of planning and industrial management that have been developed over the past decade and to recommend applications to the planning of occupational education; and
- . To provide participants with a general exposure to the interrelated challenges of urban affairs, industrial technology, manpower planning, population growth, and general education, as they relate to and affect occupational needs."

Discussions with acting heads of the Division during the summer period between the Associate Commissioner's retirement and project initiation produced some modifications to the above objectives. The experimental character of the Institute was further emphasized; achieving immediate impact on participant behavior was stressed; and the emphasis of the objectives was shifted to some extent from "broad exposure" toward "developing applicable competence." These objectives were stated in a letter (which became part of the contractual specification) as follows:

"The [Institute] will be multi-dimensional, addressing itself to increasing the professional educational management competence of participating administrators in a number of interrelated areas:

1. In comprehensive planning and forecasting as required to keep occupational education programs abreast of emerging and changing technologies;
2. In keeping aware and taking practical advantage of the complex programs and resources of federal and state agencies upon which the administrator can draw;

3. In using modern business management techniques that can be applied effectively to the development and management of occupational education; and
4. In developing a sensitivity to the needs and a motivation for the development of programs for minority and other disadvantaged groups; and in developing an understanding of the potential benefits and pitfalls associated with the use of priority population personnel as occupational education management staff members."

* * * * *

"The [Institute] will not be designed to make a management specialist of the educational administrator, but to upgrade and increase the administrator's present level of competence in using management technologies in the planning, organizing, and directing of his educational responsibilities."

These early objectives were associated with a planned participant mix which encompassed organizations and programs ranging from vocational/technical education to manpower programs, to community college programs in occupational education; administrative levels ranging from state supervisors to top administrators at the local or program level, to second echelon administrators, to teachers aspiring to be administrators; and geographic areas of responsibility ranging from statewide to urban centers, to suburban schools, to the semirural regional vocational/technical schools. Given that the Institute was to be presented to a single unchanging group of participants and was expected to produce immediate impact, this broad potential range of participant responsibilities, background, and interests was clearly a problem.

An analysis of priorities led to a further clarification of participant status. The Division's high priority on immediate or short-term impact resulted in the agreement that participants should have sufficient authority to put into practice the kinds of concepts and techniques introduced in the Institute.

Immediate impact would be most likely if the participants were currently administrators; i.e., individuals holding administrative positions as opposed to potential or aspiring administrators. The Institute design concept, therefore, was to be directed at participants having administrative responsibility and authority. Consequently, invitations to participate in the Institute were issued only to administrative level personnel. By concentrating instructional emphasis on this level, it was expected that homogeneity of interest would be retained to keep the Institute at a specific and practical level of instruction, as opposed to the general and theoretical level that might have been produced if lower level participants were added to the group.

This change alleviated the problems foreseen in mixing administrative levels and the associated range of administrative responsibilities. The issue of dealing with participants whose background, program purposes and target populations, and organizational characteristics were, however, quite different. The agreed upon participant representation encompassed the following categories:

- . Commonwealth departments and agencies concerned with occupational education and manpower training programs:
 - . Division of Occupational Education;
 - . manpower organizations (e.g., DES, CAMPS);
 - . Board of Regional Community Colleges.
- . Occupational education organizations in city and regional schools and community colleges:
 - . regional vocational/technical schools;
 - . city and town vocational/technical schools;
 - . community colleges.
- . Manpower training organizations (including organizations responsible for training, coordination, and/or planning).

This issue was resolved in two ways: First, Institute content and purpose would be focused on the administrator responsible for a school or manpower program organization. State-level participants would benefit by determining, with assistance from instructors, the relevance of locally oriented lessons for their broader and more general responsibilities, but unique state-level concerns would be addressed explicitly.

Second, to bridge the gap between presentation of generally applicable management concepts, approaches, and techniques and the participants' need to adapt these concepts, approaches, and techniques to the particular requirements of their own diverse program and organizational situations, a problem/action-oriented approach would be adopted. The design would emphasize the logical progression from problem identification to corrective action, both generally as an overall lesson plan format and specifically as an individual task to be conducted by each participant in connection with his unique needs and situation. Consequently, the objectives assumed a process-type formulation expressed, in the preliminary design, as follows:

- " . To define the critical needs and problems of occupational education/manpower administrators, emphasizing areas such as: forecasting and planning for emerging occupational needs; meeting the special needs of disadvantaged/handicapped populations; developing and obtaining support for new programs; and managing organizational change.
- . To examine advanced management concepts and techniques that are appropriate to deal with these needs and problems.
- . To explore and experiment with applications of these concepts and techniques, within the Institute setting, to the needs and problems of occupational education/manpower organizations in general, specific types of organizations, and each participant's own organization."

Final Design

The character and primary emphasis of the final design are expressed in the two letters of solicitation sent to prospective participants. These letters are contained in Appendix B. A complete statement of the problem/action-oriented approach and the major questions and management subjects addressed in the Institute is presented in the prospectus employed in solicitation. This prospectus is contained in Appendix C.

The objectives included in the final design were formulated to guide the integration of specific problem or subject units within the overall problem-action progression of the lesson plan. The primary objectives, on a unit-by-unit basis, are listed below.

1. Introduction: To establish the results/action/change orientation and the instructor-participant relationship required to bring about results.
- 2a. Define Problems: To establish a set of problems, faced by participants individually and collectively, and show how the Institute plans to deal with them.
- 2b. Formulate Approach: To establish a process framework and constructive attitude in the form of a systematic problem-solving approach aimed at problems within participants' control.
3. Define System: To establish a system framework of concepts and information about needs, resources, and institutions which will provide a reference for relating (a) various kinds of objectives and problems and (b) general problems with specific ones facing particular administrators.
- 4a. Analyzing and Projecting the System - General: To examine the broad external environment with which occupational education/manpower (OE/M) administrators are concerned as a dynamic system to be analyzed, projected, and related to the demands placed on organizations, including exploration of some relevant "alternative futures" and the concept of dealing with uncertainty.
- 4b. Analyzing and Projecting the System - Techniques: To examine specific techniques for forecasting the

future and relating the future to organizations in the OE/M area.

5. Program Planning: To examine types of planning and planning concepts useful for relating current/future environmental systems to the current program and future plans of an OE/M organization, including exploration of applicable Planning, Programming and Budgeting System (PPBS) elements and concepts and the formulation of program structures for OE/M in general, for various types of organizations, and for participants' own organizations.
- 6a. Program Analysis and Design - The Process in General: To apply PPBS-type program analysis approach and techniques to elements of OE/M program structure, emphasizing quantitative assessment of needs, operational objective statements, and examination of alternative means of achieving objectives.
- 6b. Program Analysis and Design - The Process Applied to Priority Populations: To apply program analysis to the substantive problem of providing skills to clientele with unique needs and characteristics.
- 7a. Program Development and Funding - General: To examine the iterative process of determining administrative requirements and funding possibilities to meet a preferred program design, redesigning programs consistent with administrative and funding constraints, and related managerial approaches.
- 7b. Program Development and Funding - Middle Week Application Assignment: To prepare a program design and development and funding proposal in the priority population area for presentation and evaluation.
- 7c. Program Development and Funding - Federal/State/Local Criteria: To define the requirements for organizational growth and effectiveness in terms of the current and evolving criteria for support/funding from various types of higher authority.
8. Process of Change: To examine organizational change and adaptation from the standpoint of the administrator seeking to gear his organization to a changing environment, to introduce new programs, and to implement action on a series of defined problems.

9. Planning and Controlling Change: To identify and plan the application of techniques useful to administrators seeking to move their organizations from "Point A" to "Point B" in terms of needs to be addressed by programs and existing administrative problems, by breaking down a change program into a series of projects.
10. Organizational Design: To evaluate existing organizational structures in relation to the management demands of (a) ongoing programs and (b) a program of organizational change.
11. Institutional Planning and Control: To define an immediate and longer term specification for organizational management information systems based on examination of current systems employed by OE/M administrators relative to the ongoing program needs, the demands placed by a commitment to change, and the state-of-the-art of information system technology and computer applications.
12. Managerial Skills: To plan a self- and subordinate-development program based on an evaluation of administrator and organizational requirements with respect to OE/M in general, specific current and future demands, and the change process.
13. Organizational Development: To place self- and subordinate-development in the broader context of a plan for introducing change to groups within the organization and for shaping the organization as a whole during the period of transformation.
14. Anticipating Obstacles: To predict and develop anticipatory plans to deal with obstacles to the specific kinds of changes which are likely to be attempted as a consequence of Institute experience.
15. Plan-of-Action Development: To prepare a time-phased plan for post-Institute action, based on preliminary analyses, decisions, and plans developed during the Institute.
16. Summary and Evaluation: To summarize the Institute approach, objectives, and content as preparation for participant evaluation of the program.

Some changes in unit design and sequence were made during the final design. For the most part, however, objectives were not modified significantly. Among the changes were the following:

- . Simulation techniques for forecasting were emphasized to the exclusion of many other techniques as a result of reassessing the deficiencies in manpower data.
- . The application of program analysis to priority populations was shifted to focus specifically on problems of motivation and organizational climate among these populations.
- . Program development and funding applied to priority populations were made an optional choice in the middle-week assignment because it became evident during the Institute that many participants wanted to pursue other kinds of problems during the period between sessions.
- . Units concerned with the planning and controlling of change and with organizational design were resequenced, and emphasis was shifted from the technical aspects of planning change toward the behavioral analysis of the process and the requirements of change.
- . The managerial skills and organizational development units were compressed and shifted to an emphasis on administrators' time problems and the means to plan and manage time more effectively.

A final set of objectives was established immediately prior to the Institute presentation for evaluation purposes. These objectives are discussed in Chapter III.

Further development of the problem/action-oriented lesson plan produced a mix of teaching methods, principally workshops, simulation exercises, case discussions, and lecture/general discussions. The teaching process generally proceeded from the particular to the general. For example, lectures on abstract principles of planning or management systems were avoided; lectures were emphasized that summarized the important content addressed in practical shop sessions and that provided additional guidance on the applicability and limitations of particular approaches or

techniques. Problem/action-oriented workshop sessions were used to obtain personal and direct participant involvement in working with management techniques on manageable elements of complex occupational education problems. Experience-based learning through participation in management simulation exercises was emphasized in the units of the Institute concerned with organizational behavior.

Institute Presentation

The Institute was presented during the weeks of January 10 to 15 and January 25 to 29, 1971. The Institute schedule is contained in Appendix D. The set of materials provided to participants is listed in Appendix E, according to the day-to-day grouping and sequence in which they were discussed in formal sessions. The bibliography of materials provided to participants following the Institute is included in Appendix F.

A list of participants and their organizations is contained in Appendix G. Although there were 30 formal acceptances to the Institute invitations, the list contains 27 names, reflecting the elimination of two "no-shows" and one early dropout. The 20 participants who completed the Institute are identified on the list. Exhibit 1 summarizes Institute attendance by category of participant.

The following chapter provides additional information about instructors' expectations concerning Institute outcomes, dropouts, and some key events and problems characterizing the presentation of the Institute.

Exhibit 1

SUMMARY OF INSTITUTE ATTENDANCE

<u>Participant Category</u>	<u>Acceptances (Or Designees)</u>	<u>No-Shows</u>	<u>Dropouts*</u>	<u>Completions</u>
Commonwealth Departments and Agencies Concerned with Occupational Education and Manpower Training Programs				
. Division of Occupational Education	4		1	3
. Manpower Organizations (e.g., DES, CAMPS)	1			1
. Board of Regional Community Colleges	1			1
Occupational Education Organizations in City and Regional Schools and Community Colleges				
. Regional Vocational/Technical Schools	5	1	1	3
. City and Town Vocational/Technical Schools	8		1	7
. Community Colleges	2		1	1
Manpower Training Organizations (including organizations responsible for training, coordination and/or planning)	9	1	4	4
TOTAL	30	2	8	20

*Individuals who dropped out at various points during the 2-week program.

III. EVALUATION

The evaluation of the Institute is presented in this chapter in two major parts. The first part presents a summary assessment of the impact that the Institute had on participants. The second part presents the TMI staff's retrospective observations and comments with regard to the overall goals of the Institute, its structure, and the assumptions and premises on which the Institute was designed.

Assessment of Institute Impact

Assessment Against Institute Teaching Objectives

The fundamental goal of management training is to change the behavior of the student in a way that reflects improved administrative skill, added perception and use of sound management principles and concepts, and better overall managerial effectiveness. To measure the achievement of that goal, TMI utilized an evaluation methodology that focused on a set of nine behavioral objectives. Prior to the Institute, these objectives were established to serve as guidelines for the development of the specific scope and design of each teaching unit in the Institute. These objectives also provided a set of generic learning and behavioral change dimensions along which the impact of the Institute could be assessed. The objectives were used in both the instructors' assessment just after the end of the Institute (about February 1, 1971) and in the analysis and evaluation of participant field interview data several weeks later (about April 15, 1971).

In planning the field interviews, the Division and TMI agreed that since a limited number were to be made, only those participants from the traditional occupational system would be interviewed. This decision was made for two reasons: first, this group of administrators (ten) was the target group for training; and second, the results of their evaluation would be expected to have a pattern, since these participants formed a homogeneous group with common problems, needs, and responsibilities.

The rest of the participants who completed the Institute were sent a comprehensive questionnaire. When the responses to these questionnaires were evaluated, it was found that the results were consistent with the field interview results. Therefore, they were not specifically reported here.

Dropouts were sent a different questionnaire in an attempt to determine why they did not complete the Institute. Reasons for dropping out are discussed under "Staff Observations and Comments" later in this chapter.

In conducting the interviews, the staff used an unstructured interview technique by which the initiative for identifying specific examples of changes to managerial behavior that were identifiable with the Institute experience was left to the participant. Since a participant could be expected to provide a limited amount of time for interviewing, this approach automatically allocated to discussion those Institute impacts that the participants felt were important and relevant. Appendix H includes some of the detailed notes taken during these interviews.

Even though the interviews were unstructured, the data collected was able to be analyzed using the nine behavioral objectives. Each behavioral objective is discussed below in terms of the Institute impact. The discussion is broken down into two parts: the degree to which the objective was achieved as assessed by the TMI instructor staff in February just after the end of the Institute and in April following the field interviews. This discussion is followed by the participants' assessment regarding the overall value and usefulness of the Institute.

1. Participants will apply improved measures of performance in evaluating their organizations, will be better able to identify gaps in performance, will be able to distinguish output measures of performance from process measures and input measures.

February Assessment

This Institute objective involved helping participants become more sensitive to organizational performance measurement, make distinctions between the three different types of performance measures (i.e., input, process, and output), and search for and apply better criteria than they are currently using for organizational performance measurement. The instructors' experiences during the Institute indicated that most of the participants did not show an adequate understanding of organizational performance measurement. In particular, for most participants, the understanding and specification of performance measures of an output nature were difficult.

April Assessment

Measuring overall organizational performance is a process with which participants were still uncomfortable at the time of the field interviews. Only one of the ten participants interviewed made specific mention of a change in perception about better ways of measuring organizational performance.

Increased sensitivity and awareness of the problem and process of organizational performance measurement, however, was achieved from the Institute experience. Three participants raised questions about the adequacy of the overall organizational performance measurement process as it relates to their organizations' purposes and missions.

2. Participants will recognize explicitly and systematically the problems confronting their organizations, and their responsibilities and roles as managers in the problem-finding and problem-solving processes. Participants will employ a systematic process in problem-solving, recognizing the need to proceed through an explicit, sequential series of analytical steps.

February Assessment

The understanding and use of a systematic approach to problem-finding and problem-solving were emphasized during the Institute. The instructors believed that the participants developed a good grasp of the systematic approach to problem-solving that was presented. Less progress seemed to have been made, however, in the development of ability to identify problems more systematically.

Determining that a problem exists requires a criterion for determining what is "normal" or "satisfactory" performance as well as a means for measuring that conditions are unsatisfactory. In many organizations, both the criterion for normal performance and the measurement technique may not be available, thus making problem-finding difficult. The process of "problem-finding" is deterred until administrators have a way of measuring organizational performance.

April Assessment

Nine of the ten participants interviewed described post-Institute experiences or insights related to the achievement of this objective. All nine felt that they had become more systematic and analytical in problem-solving. Only two expressed clear evidence that they had become more skilled in the problem-finding process.

The difficulty that most participants had in developing a rigorous approach to problem-finding is, for a number of reasons, neither unusual nor surprising. First, problem-finding concepts and approaches are difficult to master in a short-duration learning experience. Second, this material was presented early in the Institute, at a point where the participants were still "sizing up" the instructors and each other and "gearing down" from day-to-day concerns.

Finally, the approach chosen for teaching this material was not completely effective. Much of the material used in the problem-finding units was taken from participant responses to a pre-Institute questionnaire, plus data generated during a first day workshop. As a result, less structure was built into the material than now seems warranted.

The TMI staff concludes that the problem-finding units (and the performance evaluation units as well) would have been more effective if, one, the material were spread out over the whole Institute schedule or at least postponed until later in the Institute and, two, a more structured teaching technique such as third person analysis of industrial case materials were utilized.

3. Participants will raise more questions and concerns regarding their organizations' overall performances and will perceive a greater need for improvements.

February Assessment

Although this teaching objective may seem to have some negative overtones, its achievement is an important first step in improving actual organizational performance. Although for most participants, the staff felt that this objective was not achieved, one striking example of successfully meeting this objective was observed.

Early during the first week of the Institute presentation, a participant brought up in class a problem associated with one facet of his organization's performance. During subsequent workshop and discussion sessions, a clearly noticeable change in his perception of the problem and the desired performance in this area was noted by the instructor team. During the middle week between sessions, this participant conducted a further analysis of the problem, using the middle-week assignment format. During the review of this assignment on Monday of the second week, the participant presented a detailed analysis which clearly demonstrated that for him, this teaching objective had been achieved.

April Assessment

Four of the interviewed participants stated that since the Institute, they have raised important questions concerning how well their organizations are performing. The most striking example of this self-reflection is expressed in a memo from one of the participants. This memo, which described the Institute, was sent to all administrators in his school system (see Appendix H, Exhibit H-1). It is through this kind of self-reflection and questioning process that useful, long-lasting management behavioral change will take place. These results hold promise for substantial future benefits for these four men and their organizations.

4. Participants will identify changes which they have initiated or are planning to initiate.

February Assessment

Changes that were initiated by participants on the basis of Institute experience obviously could not be assessed one week after the end of the Institute. The question of plans for change was relevant, however.

Throughout the course of the Institute, the action and planning for action focus were continually emphasized. Concept by concept and topic by topic, the participant was challenged to relate the subject matter to his own management situation.

At the end of the Institute, the instructors felt that the action focus, including the preparation of a plan of action, had been successful. Of the 20 participants who completed the Institute, 15 submitted a plan of action on the last day. These plans of action focused on programs or activities that the participants would initiate upon returning to their organizations.

The other five participants indicated either that they wanted more time to develop their plans or had left the session early. Four of these five indicated that they would develop a plan of action when they returned to their organizations.

April Assessment

During the field interviews, it was found that each participant had made changes in the way that he personally managed or in the way that tasks were accomplished in his organization. Some had more formalized and comprehensive change programs than others; all had plans for initiating still further changes in the future. Both as members of the instruction team and as teachers of management theory, the TMI interviewers were impressed with the in-practice results observed.

5. Participants will employ or plan to employ new approaches or techniques useful in the process of planned change (e.g., PERT, Organizational Development techniques, increased delegation, time management techniques, etc.).

February Assessment

Evidence of achieving this objective was indicated in the plans of action by the specification of the participants' intent to utilize the planned change concepts or techniques that were presented during the Institute. Almost every plan of action included such statements of intent.

April Assessment

More instances of Institute impact relative to this teaching objective were mentioned by participants during the field interviews than any other. Participants seemed able to make the important bridge between planning desired change in their own managerial style or in the way in which their organizations were managed and implementing such changes. They saw the Institute as being helpful to them in making this bridge.

6. Participants will perceive more problems and potentialities for improvement in the "human" aspects of their organizations.

February Assessment

Throughout the Institute, it was obvious to the instructor staff that the teaching units dealing with the human, or behavioral, aspects of the organization and of the management role held the greatest interest for participants. A number of reasons might explain this interest. First, the teaching material and style tended to facilitate the development of interest and enthusiasm. Second, top administrators such as the participants in this group usually have vast experience with "people problems," motivation, etc., and easily become involved in discussions related to this subject. Third, people involved in education and training, because of the nature of the work, usually are empathetic and sensitive to the human elements of organizations. Finally, a number of participants had not been formally exposed, in a training environment, to recent advances in organizational behavior concepts and therefore seized the opportunity to relate these new concepts to their observations from practice.

Because of this interest, the instructors predicted at the end of the Institute that much of the future impact would be along human and organizational behavioral dimensions.

April Assessment

All of the participants interviewed in April either had begun implementing changes in this area or were rethinking or reformulating the part of their management role that deals with the human aspects of the organization.

Many participants talked about ideas and plans for further change in this area. These field interviews further convinced the TMI interviewers that Institute impact related to the human aspects of participants' jobs was likely to have the most long-lasting effect.

7. Participants will understand the basic concepts and principles of a number of areas of management technologies and processes (e.g., systems analysis, PBBS, project management, behavioral science, etc.) and the relevance of these technologies and processes to their organizations' problems.

February Assessment

During the Institute design, decisions regarding treatment of a large number of wide-ranging management topics had to be made. Knowledge and skills, as well as the interests that participants brought to the Institute, had to be considered. It was clear, therefore, that material sufficient to make a participant highly knowledgeable or well skilled in one particular topic could not be provided. Consequently, the objective became that of providing participants with enough information about these topics for them to be able to discuss them knowledgeably with other administrators and to determine the applicability of these management technologies and processes to their own organizations. Almost all participants listed on their plans of action steps to be taken to implement these technologies and processes upon their return to their organizations.

April Assessment

A number of participants had taken steps to introduce management technologies and processes within their organizations. The technologies and processes to be implemented varied. Some participants commented that they were going to "dig deeper" in one or more areas so that they could develop the necessary understanding to plan and carry out an effective implementation. On the basis of participant comments and interviewer observations, all participants seem to have developed or increased appreciation and understanding of the management techniques and processes that

are having effect on their organizations now or that will have in the future.

8. Participants will perceive existing and potential problems in the context of a broader system of external and internal factors, identifying new relationships and options with regard to external and internal needs.

February Assessment

The Institute registered a substantial impact on participants with respect to internal factors (i.e., a management focus on the internal aspects of the organization and how it performs its tasks) and less of an impact with respect to external factors (i.e., a management focus on the environment exterior to the organization and what it is that the organization should be doing). This assessment, however, should be viewed with respect to the way in which participants, prior to the Institute, looked at the external and internal factors as these factors related to each other in the context of the overall managerial role.

During the last session on the final day, when a discussion of the impact of the institute as a whole was taking place, the question of the definition of the overall managerial role came up. Participants saw that the Institute had focused on the two major components of that role: one associated with the task of dealing with external factors, needs, and problems; and the other of dealing with internal factors, needs, and problems. Some participants observed that prior to the Institute, they were not aware of this integrated, 2-part role.

Most participants seemed to feel most comfortable, and are probably most competent, dealing with the internally oriented part of the managerial role. This predisposition may be due to a division of responsibility, for example, between a director and a school board or his superintendent, where some of the external factors of the administrator's job are beyond his scope to handle and, therefore, are taken as "givens" by him. As an administrator, he then takes these given organization purposes, goals, or constraints and translates them into internal policy decisions related to the more specific organizational objectives, programs, and resources.

One of the Institute's objectives was to project this integrated managerial role so that participants gained an understanding of the administrator's parity responsibilities for both the external and internal spheres of planning and decision-making. Only during the last session did the staff see evidence that the participants were developing a perception of this integrated role.

As the staff reflected back on the materials used, the Institute design, and even the pre-Institute solicitation brochure and questionnaire, it was clear that the duality of the managerial role had been emphasized. During the discussion on the last day, however, some participants felt that the Institute did not provide them with a sufficiently explicit framework for understanding and analyzing this integrated managerial role. For some, therefore, the point was not made; for others, thinking about this role had probably only been initiated.

April Assessment

The staff was highly encouraged by the progress that had been made toward achieving this teaching objective in the weeks since the end of the Institute. Each participant interviewed described instances that indicated a broader view of management along desirable lines. For some, this broadening included the beginning of the development of the integrated, dual role that the staff sought to establish at the Institute. Over a long term, this new perspective may have the greatest impact on these administrators.

9. Participants will deal with several major aspects of their job performance with increased emphasis on objectives and plans (e.g., project and program planning, planned programs of organizational change, personal career planning, etc.), recognizing the key elements of useful objectives and plans.

February Assessment

Substantial impact was noted by the instructors throughout the Institute with respect to this teaching objective. The establishment of objectives and the development of plans

to meet these objectives were a theme that was repeated continuously. Two major tasks provided concrete evidence that impact was achieved.

The first evidence was the development, during the middle week, of analyses and plans related to a specific on-the-job problem identified by the participants. For a number of participants, this middle-week exercise was described as being extremely useful (particularly since the participants managed to accomplish this task in the face of a work backlog that built up while they were away during the Institute's first week). The second evidence of impact came on the last day when the participants voluntarily developed a set of initial objectives and plans for the implementation of ideas, concepts, and techniques presented and discussed at the Institute upon their return to their organizations.

April Assessment

Evidence of planning and an orientation toward the use of objectives and an objective-setting process were noted during the field interviews. However, with three or four exceptions, objective-setting and planning processes tended to be fragmentary or ad hoc and directed at one or two specific problems or situations.

Overall Participant Assessment

Both in February and in April, participants were asked to give an overall assessment of the Institute. On the last day of the Institute, the focus of the assessment was on a critique of the Institute design and execution; in the evaluation followup, emphasis was placed on judgments of overall value to the individual and on the general quality of the Institute.

February Assessment

Through an "interactive" questionnaire approach, a critique of the Institute was conducted on the last day. The participants,¹ with limited guidance from the staff, identified the evaluation items they felt deserved discussion, recorded their individual impressions related to these items, and discussed each in an "open forum." Through this process, a set of questions and responses was developed and is summarized below.

Question 1: Would the Institute have been more useful if the mixture of participants were narrower?

Participant Response:

. Yes: 4

"Would provide for more depth."

. No: 12

"Problems are more diverse in a heterogeneous group."

"Broader range provides for more growth."

TMI Comment:

The focus of the discussion for this question was on the advisability of mixing traditional occupational education administrators and manpower training administrators. The participants who completed the Institute felt that

¹Four of the twenty participants who completed the Institute were unable to remain for the critique because of commitments to return to their offices, the desire to avoid traffic, delays, etc., leaving 16 participants who were involved in this critique.

having a mixed group was valuable. Comments about getting to know the problems of the other group, the individuals involved, etc., were made. A few people remarked that a single group or class of participants would reduce the broadening effect that they felt had taken place. A couple of vocational administrators suggested that people from other parts of the traditional secondary education system would also be appropriate.

Question 2: With regard to the approach of working on specific individual problems as part of the Institute:

- a. Do you believe it is a good approach?
- b. Would you personally respond to a specific problem assignment?
- c. What type of problem would you like to mark on: one selected by the instructor or one selected by you?

Participant Response:

a. Yes: 16 No: 0

b. Yes: 15 No: 1

c. Self: 10 Instructor: 2 Combination: 4

TMI Comment:

This question referred primarily to the middle-week problem analysis assignment. Although the above response suggests its value in the Institute design, only a few participants actually worked on a problem using the Institute format and approach during the middle-week break. Although both the instructors and the participants agreed that this assignment was useful, a way of getting more positive results is needed if the two week, with one week off, format were retained.

Questions 3 to 8: How would you evaluate the following instructional units of the Institute, and what suggestions would you make regarding the time devoted to them?

		<u>Evaluation¹ Time</u>			
		<u>positive</u>	<u>negative</u>	<u>more time</u>	<u>less time</u>
Q3.	Manpower Needs and Forecasts	4	4	4	3
Q4.	Computer Assisted Planning	2	3	2	6
Q5.	Systems Analysis	5	1	7	1
Q6.	Time Management	5	0	7	1
Q7.	Problem Definition	4	2	7	1
Q8.	Integration of External and Internal Aspects of Management Role	2	2	6	3

Question 9: Should the Institute have gone into role conflict, ultimate purpose, etc.?

Participant Response:

. Yes: 7

"Could be perused during informal periods."

"In the early evenings."

"Briefly. It might enhance communications and motivation."

"A desirable technique. It may aid understanding of present role conflicts."

. No: 6

"Management course, regardless of what you manage."

"Not unless it is personalized and focused around the role of the manager and his own environment (self-analysis)."

¹Number of respondents varied on both parts of each question.

"Not unless it is used in the evening program for better understanding of each area.

. No Answer: 2

TMI Comment:

"Ultimate purpose" here primarily refers to the Division's goal of bringing together, in a management training experience, administrators from the traditional occupational education institutions and manpower training agencies. (See "Staff Observations and Comments" for a more comprehensive discussion of the "mixed audience" problem.)

Participants' Overall Comments on the Institute (February)

"The Institute experience was very valuable. It should be continued."

"The Institute should have been more energetic earlier."

"All elements of the Institute were important."

"Methods and techniques discussed can be applied to one's immediate mission."

"The instructors should be less fearful of losing participants. The instructors should be more forceful."

"The instructors should control the waste of class time."

"Use behavioral science motivation in the beginning as it will tend to keep the remainder of the program on target."

"Should have had better integration of what appeared to be two separate major aspects of management."

April Assessment

During the field interviews, three questions were asked after the participants had finished their discussions of Institute impact. These questions and their responses are included below.

Question 1: What is your overall evaluation of the Institute?

"Positive; an enriching experience."

"Pleased at the opportunity to be a part of it. It was very satisfactory."

"Worthwhile experience."

"Above average professional experience."

"Worthwhile. Damn good."

"Good overall experience."

"Fine."

"'C' on an 'A' to 'D' scale; however, I've been to very few 'A' conferences."

"Of inestimable benefit."

Question 2: Did you feel that the Institute was worth the time and effort required?

All participants said "yes," with most adding the qualification that it is difficult for them to give up two weeks in one month for an event such as this.

Question 3: If you knew prior to the Institute what you know now about it, would you have come?

All participants responded that they would still attend; however, one participant said he would come only if the Institute were one week in duration.

Staff Observations and Comments

Participant Mix

A major problem with respect to Institute participants concerned the emergence of a "split" between two of the three major groups attending the Institute: secondary vocational education administrators and manpower training administrators. For some participants, this situation took on the aspect of conflict; for others, it simply emphasized the reality of apparent competitive roles.

One goal of the Institute was to get people from these groups together so that they might begin to work more closely with each other. A number of incidents occurred early during the first week, however, that made conditions uncomfortable for some of the participants. As a result, four of the eight manpower participants left by Thursday of the first week. In TMI's opinion, the apparent conflict between the two groups contributed substantially to these four participants dropping out.

This experience raises the question of the advisability of having a management training experience with a mixed group of people from both the traditional vocational education system and the manpower training agencies. A conflict seems to be inherent between two goals: the first is the explicit management training goal of developing skills related to the specific shared needs of a particular class of participants; the second is the system goal of building bridges between organizations with similar problems and mutual, yet competing, interests. Any difficulties incurred in meeting the second goal, an operational goal of the broader occupational education system, creates an impediment to achieving the first goal, that of training. In TMI's view, a management institute is not the vehicle for achieving the system goal, particularly when natural bridge-building efforts have not been initiated at the legislative, divisional, or organizational levels.

It should be noted, however, that when the question of participant mix was raised on the last day of the Institute presentation, a number of the remaining participants felt that this exposure during the 2-week period was, in fact, helpful to them. A few participants did comment specifically that they had become acquainted with a member of "the other group" and expected to be working more closely with this person in the future. These

remarks represented positive examples of system "bridge-building."

Dropouts

In addition to the manpower agency participants that left, four nonmanpower agency participants also dropped out: a regional vocational school superintendent director, a city/town vocational school director, a member of the Division staff, and one of the community college group. Their reasons for not completing the Institute varied. The regional vocational school superintendent director indicated early in the first week that he would be missing several sessions and would like to be considered an "observer." During the first week, he missed the majority of sessions and did not return for the second week.

The city/town vocational school administrator was told by his advisory board that he could not return to the second week of the Institute because of pressures on the job. He attended all sessions during the first week and subsequently indicated to us his positive feelings regarding the Institute and his disappointment over not being able to come back for the second week.

The Division staff member had received a high priority assignment while the Institute was being conducted and found that he was unable to meet both commitments. He dropped out early in the first week. The community college administrator attended sessions during both weeks; however, his attendance was so sporadic that he was not considered an Institute completion.

Participant Motivation

The problem of motivating people to work to a satisfactory level of performance at the Institute has major significance to any future institute. Also involved in this problem is motivating participants to stay once they begin the Institute. A number of factors affected participant motivation during the pilot Institute. The Institute was rescheduled to be run during the month of January, a difficult time to ask a busy administrator to take two weeks off from his regular duties. Also, at the beginning of the Institute, some participants commented (one openly to the group) that they were there only to see what was going to be presented. In addition, during the first day,

substantial resistance was observed when the announcement was made that some formal evening workshop sessions would be necessary. All of these factors had a negative effect on the participants' motivation to stay and to work.

Teaching Style

Another difficulty concerns the degree to which participants were accustomed to the teaching style used in the Institute; i.e., a nondirective, inductive, discussion-oriented methodology. This teaching style parallels that being used in most graduate schools of administration as well as in most executive development programs. It utilizes a number of teaching vehicles: administrative cases that usually do not have fixed solutions or answers; workshops in which the participants are usually given an objective to be achieved within a rather loosely structured framework; use of a lecture format in a way that is usually limited to lecturettes summarizing principles or points to be drawn from discussion developed around material; etc.

TMI believes that the majority of the participants were not used to this teaching style. (On the basis of the pre-Institute questionnaire, it is safe to say that most, if not all participants, had little formal management education or training during the past several years.) However, this approach to management education and training is believed to be the most effective. Therefore, sufficient explanation of purpose, expected outcomes, and methodology should be provided at the beginning of the Institute so that participants can overcome ambiguities and anxieties that may be caused by a teaching approach that is unfamiliar. In addition, this emphasis and discussion of what is going on and what is going to happen should begin each teaching unit.

Management Strength in Occupational Education

On the basis of discussions with participants both during and after the Institute, plus interviews with other occupational administrators during the research phase of this project, TMI is convinced that management training and development are clearly needed throughout occupational education in the Commonwealth.

The Institute was conducted at a time when there were major environmental trends affecting the occupational

education system environment. Chief among these were the highest overall unemployment rate in many years caused by general economic conditions; specific, localized high unemployment conditions caused by such factors as substantial defense contract cut-backs and high job displacement rates in certain industries in the Commonwealth (e.g., the shoe industry) caused by rising foreign imports, technological innovations, etc.; and the emergence of new technologies and skill areas caused by shifts in national and local attention to such factors as ecology, health care, etc. These trends present major challenges to the "system" either as opportunities to be seized or threats to be minimized or avoided.

If the participant group at the pilot Institute session was representative of administrators in the occupational education "system," it is fair to assume that system administrators have varying degrees of recognition and understanding of and sensitivity to environmental challenges. The combined effect of rapid environmental changes and varying planning skills among occupational administrators suggests that Division attention should be focused on developing system planning capability.

Institute Design Structure

During the Institute logic design, sequence of emphasis and material treatment (i.e., problem/plan/program/management/action) appeared to be appropriate. However, experience in conducting the Institute suggests consideration of alternative logic structures. As discussed earlier, participants had more difficulty than was anticipated dealing with a large part of the material presented in the first few sessions. This material concerned problem analysis and planning concepts and is least familiar to and demanding of this group of participants. (It should be noted that this is true generally of any group of management people who have not been involved in rigorous management education or training in recent years.)

Other materials which generated greater participant interest (particularly behavioral topics) came later in the Institute, causing an imbalance over the 2-week period between difficult concepts (with associated lower levels of innate liveliness) and more exciting materials (which usually were less intellectually demanding). If the 2-week format for the Institute were retained, revision of the logic design should be considered.

IV. RECOMMENDATIONS

This chapter presents a series of recommendations which are responsive to two questions included in the project specification:

- . Should the Institute be repeated?
- . What, if any, changes in the Institute design would increase the effectiveness of future management institutes?

Should the Institute Be Repeated?

The overall concept of the Institute is sound. It addresses many needs from a point of view and in a way which is more meaningful to participants than many typical types of training. The Institute focused for example, on problems and opportunities from the standpoint of the participants' own options and priorities as opposed to the communication or selling of approaches prescribed by governmental or academic authorities. It addresses and integrates a broad spectrum of the management process, ranging from problem identification to solution implementation in one dimension and from analysis of the external environment to organizational behavior analysis in another. The Institute also deals systematically with the interrelationships among various aspects of administration.

These basic attributes of the Institute design are important and contribute to the kind of perspective needed in a rapidly changing environment. Evaluation evidence showed that participants in the pilot Institute agree. Therefore, TMI's first recommendation is as follows.

Recommendation 1: Problem/action-oriented management training having a broad and systematic focus on the job of the administrator in a changing environment is needed.

The Institute's impact was sufficient to warrant repeating with the same design, but with some changes in execution. A superior alternative, however, is to present future sessions in a modified design, encompassing the same objective, instructional approach, and content. Either the current Institute, or preferably, an improved

modification, should be offered to other top administrators on a continuing basis. The remainder of this chapter deals with these improvements in the Institute design and execution.

What Changes Should be Made?

The consideration of desirable changes in Institute design must be constrained for manageability. It is beyond the scope of this report, for example, to consider the full range of means for improving management performance within vocational education and manpower training institutions (i.e., training alternatives such as full-time graduate education in management; other personnel-related alternatives such as differing personnel selection policies and practices; development of new management aids such as large-scale funding of new forecasting and planning techniques applicable at the local level; etc.). For the purpose of this report, the general limitation employed was "short-term in-service training aimed at improving organizational effectiveness through developing management capability." In this context, it is possible to synthesize the evaluation and analysis of the pilot Institute by TMI instructors in the recommendations which follow.

Recommendation 2: The means employed to improve organizational effectiveness (the ultimate objective) should be training aimed at building the capabilities of the management teams within these organizations, rather than training focused only on improvement in top administrators' capabilities.

Recommendation 3: New approaches, supplementing the preparation by each participant of a plan of action, should be employed to ensure that the training has both immediate and continuing impact on participating organizations.

The Institute focused on top administrators. It attempted to bridge the gap between training and change in behavior on the job by emphasizing preparation of a personal plan of action for application of Institute concepts and approaches in each participant organization. This design was effective to a point, but evaluation interviews revealed limitations. Some participants found initial intentions to follow up new ideas thwarted by other job demands. Most participants experienced the

common circumstance of having gained new ideas and skills, but lacking any other administrative level personnel with whom to share, explore, and expand these ideas and skills.

This common after-training phenomenon can be remedied by providing training to several individuals in each organization. Impact on organizational effectiveness can be enhanced by relating the training to overall organizational objectives and to the role of each participant in achieving those objectives. Impact can further be enhanced by integrating the organizational objectives and newly developed skills in a framework of specific action plans and prescribed working relationships.

Three approaches are proposed to provide these relationships and integration: first, planning which specific knowledge and skills are needed and who in each organization should acquire them; second, developing a related set of action plans to link the knowledge and skills developed by different participants within an organization to the broader goals and action plans of the total organization; and third, to provide some combined training aimed at helping all participants from a given organization develop a mutually understood plan for organizational change. The outcome of this approach will be to create a more capable management team which has, at the conclusion of formal training, already taken the first collaborative step toward improved organizational effectiveness.

Recommendation 4: Training should be provided to current and potential second echelon administrators within each participating organization as well as to top administrators.

Recommendation 5: Some training should continue to be directed toward the unique needs of top administrators, with participation restricted to top administrators.

Recommendation 6: The mix of participants in the Institute's target population should include a narrower range in terms of the types of organizations and programs to enable greater emphasis on specific problems and common organizational environments.

These recommendations reflect the proposed change in emphasis toward management team building and the conclusion that the effectiveness of the pilot Institute was

reduced as a result of having a participant mix that was too broad.

It must be emphasized that the proposed expansion of the target population to include other administrative personnel within occupational education organizations does not mean that top and second echelon administrators should be provided with identical training experiences. For some types of subject matter, a mix of organizational levels is appropriate (e.g., technical subjects such as PERT); for others, it is desirable to focus on a specific level in the organizational hierarchy because of both subject matter and classroom dynamics considerations. It is also particularly important to restrict some aspects of the Institute to top administrators only, because certain aspects of their jobs are not relevant to their subordinates and other aspects are inappropriate to subordinates because they concern managing and developing staff members from the perspective of the top administrator.

The trade-off between specific problems and organizational focus and interorganizational relationship building is difficult to make. Although the mix of manpower agency, community college, and public school administrators produced some benefits, in balance, TMI concludes that the potential for more effective problem/action orientation outweighs these benefits. Consequently, future institutes should be limited to only one of these administrator groups. It should also be noted that future significant external changes acting to motivate closer collaboration among these groups might change this recommendation.

Recommendation 7: The Institute should be more adaptable to the varying needs of the participants and to the goals and programs of State and Federal Government leaders.

The Institute presentation indicated that the needs of participants varied and that the Institute design tended to force the same subject matter coverage and depth on all participants. Project planning and control techniques, for example, are critically important to administrators engaged in building a new school, but only casually relevant to administrators operating a relatively stable school. Future training should be made adaptable to the needs of participating organizations by providing the option to explore relevant areas in greater depth and

to reduce to a modest level the exploration of peripheral areas.

Although more speculative and not having the same basis in pilot Institute experience, another type of adaptability also seems desirable; i.e., the adaptability to interrelate a broad-gauge management training program of the type represented by this Institute with the specific goals and programs of leadership at the state or federal level. Frequently, for example, a training seminar is developed by higher levels of government to explain, sell, and provide direction concerning a new planning requirement, source of funds, administrative technique, etc., which is being imposed on or offered to local agencies.

These limited-purpose seminars tend to be costly. They also tend to focus on specifics without adequately placing these specifics in a broader organizational context or relating them to the various other management functions and programs that they affect. Creation of an institute design that would facilitate incorporating these types of special-purpose training within its broader management framework is desirable. Therefore, it is proposed that adaptability to such higher level interests be designed into future institutes.

Recommendation 8: The Institute should play a "facilitating" rather than "initiating" role in serving the specific needs of priority populations (disadvantaged and handicapped).

The original specification for the Institute called for emphasizing the needs of priority populations on an element-by-element basis. This concept was reshaped during development of the Institute so that priority populations were emphasized by the participation of manpower administrators and, in terms of subject matter, in units on planning and motivation. On the whole, the Institute played a "facilitating" role in terms of priority population needs (i.e., "if you want to address these needs, here are some management concepts and approaches which may help"), rather than an "initiating" role (i.e., "you should address these needs in this way").

TMI feels that the "facilitating" role is the only viable role for an institute which offers management expertise and is founded on a concept of the instructor

as a source of assistance in addressing needs recognized by the participant. It is true that the instructor may also help the participant to recognize needs that he was not aware of before; but there typically must be a basis for these needs in reality, as opposed to values. Currently, most occupational education administrators do not seem to place a high value on the needs of priority populations, and therefore, no basis for training emphasis is provided.

If values change, or if external requirements or incentives raise the interest level attached to priority population needs, building in emphasis on priority populations may become feasible. It is worth noting, however, that most unique management problems associated with priority populations are already a part of the current Institute design; e.g., organizational change, proposal preparation, motivational factors, etc.

Recommendation 9: The amount of overall training provided, in relation to the time spent by participants in formal training sessions, should be increased through expanded use of both advance preparation materials and post-session assignments and followup.

Recommendation 10: The training cost per participant should be reduced by increasing the number of participants attending sessions which cover certain types of subject matter (i.e., subjects suited to treatment in the lecture/general-discussion mode).

Both recommendations are primarily oriented toward economy, and both require changes in the timing and "packaging" of the Institute. Expanding individual preparation and followup work typically requires the separation and spacing out of sessions over a longer time period, provision of more stimuli to generate participant motivation and effort, and more stringent requirements for materials and assignments (since instructors will not be as available). A variable class-size requirement typically means dividing the curriculum into separate and relatively independent units.

The instructional cost savings are obvious in the case of increased class sizes. Substitution of materials for class time produces savings only up to a certain number of participants (e.g., the breakeven point in substituting \$5 of materials per participant for \$250 of

instructional time would be 50 participants), but this number of participants is unlikely to be exceeded in training of this type.

Recommendation 11: New means should be employed to stimulate interest and advance commitment from prospective participants.

Two general problems are involved in participant solicitation and retention: first, stimulating widespread interest so that those organizations and individuals needing this type of training will accept invitations to participate; and second, gaining a strong-enough commitment from those accepting invitations to avoid their dropping out because of premature rejection of Institute content or excessive yielding to demands "back on the job." Many administrators who could have benefitted greatly from the pilot Institute did not accept invitations, and most dropouts were either "shoppers," who attended only the first day or two, or those individuals who yielded to job demands that could have been avoided with advance preparation.

Although an authoritative approach which forces participation (e.g., soliciting school committees or boards to send their vocational personnel) might be considered for future institutes, voluntary participation is more appropriate since the institute's purpose is to help administrators, not to initiate new requirements. Thus, the invitations to attend should be perceived as an important opportunity, and acceptance should be regarded as a commitment to attend the entire institute.

The best way to establish receptivity is through support by state officials and perhaps by federal and association officials as well. Advance commitment can be obtained partly by this type of leadership support and partly by ensuring that higher level administrators and school committees within participatory organizations are prepared for and accept the participants' absences. Other means of gaining commitment should also be considered; e.g., requiring partial payment by participants' organizations and providing academic credits for all or part of the Institute.

Recommendation 12: The overall lesson plan and instructional methodology should be modified to focus more effectively on problems and action and to strengthen the development of an integrated concept of management.

This recommendation, unlike the others, is concerned primarily with the execution of the Institute and secondarily with some technical design factors. It concerns some aspects of curriculum planning and methodology for which initial judgments were proven wrong during the pilot session. The changes proposed should be effected regardless of whether or not the current Institute is repeated or a new design is developed.

The pilot design emphasized problem definition, problem-solving, and planning for a post-Institute action by participants. This emphasis should not be changed, but it should be achieved differently.

In the pilot design, the lesson plan was structured as a sequential progression from problem and need identification to planning; to program analysis, development, and funding; to management; to specific action planning. The burden of personal planning was placed on the participants. Instructors periodically summarized the areas covered in a segment of the Institute and raised the question of future application, but little pressure was applied. This process did not work well, and the session set aside for action planning on the final day was insufficient to deal with the burden of deferred analysis, decision-making, and commitment which it was to cover.

In retrospect, a preferred approach is to insert several review, integration, and action-planning sessions into the curriculum at periodic intervals. The role of the instructor at these sessions should be more directive and challenging and less reliant on inductive methods and participant initiative. In addition, more structured assignment formats should be employed for workshop and action-planning sessions, problem-oriented dialogues between participants and instructors should be established, and additional case studies should be discussed at the start of the Institute.

This proposed shift to more direction and rigor should be qualified, however. Some subject areas are best handled on a casual, undemanding basis (e.g., certain aspects of human relations); too much direction may inhibit thinking and creativity on the part of participants. Thus, this recommendation proposes, in general, a modest shift toward more direction and, specifically, a substantial shift toward more direction and challenge in the areas of action planning.

The substitution of periodic review, integration, and action-planning sessions for a sequential progression as the means to promote action permits other desirable change in the lesson plan. Several participants reported that they did not begin to appreciate the relationships among major subject areas (e.g., analysis of the organization's environment, the organization's social system, the concept of planned change) until the last few days. The instructors agree that this delayed integration was a problem and believe that it resulted primarily from the logical progression of subjects which delayed the introduction of internal organizational considerations until the second week.

With the requirements for this progression removed, TMI recommends that types of subject matter should be mixed. Technical tools, for example, can be treated in alternation with behavioral analysis of organizations; quantitatively oriented workshops can be alternated with experienced-based training employing group interaction in management games; etc. A stronger introduction and the proposed review and integration sessions can then be used to relate these different areas to one another in successive and reinforcing increments. Alternation of technical/quantitative subjects with organizational/behavioral subjects will also provide more change of pace for participants, will avoid 2- to 3-day concentrations of highly technical and difficult content, and will promote earlier and greater development of open relations among the participants.

These twelve recommendations taken together would have substantial effect on Institute design. The basic objective, concepts, and content remain relatively unchanged, but the strategy proposed for achieving the objective is different. Many elements of the new strategy could be incorporated into the 2-week format employed in the pilot Institute; TMI instructors have concluded, however, that more extensive changes would be the most effective in carrying out the recommendations which have been presented. Chapter V describes a proposed Institute design that is tailored to these recommendations.

V. PROPOSED INSTITUTE DESIGN

This chapter proposes an Institute design which will enable future sessions to overcome deficiencies evident in the pilot session and to meet additional needs not incorporated in the current Institute design. The ultimate objective of the Institute is unchanged: to improve organization effectiveness by developing management capability. The strategy proposed to achieve this objective, however, is significantly different.

The strategy incorporated in the proposed Institute design is a 3-part program which, for ease of reference, is called the Institute for Management and Organizational Development (IMOD). The three parts of the IMOD are:

- . a 4-day unit for top administrators;
- . a series of 15 to 25 elective Management Development Modules, 1/2 to 3 days each, which address specific management subjects and skills pertinent to top administrators, second echelon administrators, or both, to be conducted over a 2- to 4-month period; and
- . a 1-day organizational unit which brings together the top administrator and other participating administrators from each organization, with perhaps 3 to 5 organizations represented at each session.

The purposes and contents of these three parts are summarized in Exhibit 2.

A proposed shift in strategy toward building the capability of a management team as a means to improve organizational effectiveness is indicated in the roles of and interrelationships among the three parts of the IMOD. In the Top Administrator Unit, problems and opportunities confronting participants' organizations are examined, a preliminary plan for dealing with these problems and opportunities is developed, and the additional knowledge and skills that are required are identified.

The bridge to the following part of the program is established when participating top administrators decide,

Exhibit 2

PROPOSED DESIGN FOR INSTITUTE FOR
MANAGEMENT AND ORGANIZATIONAL DEVELOPMENT

I. Top Administrator Unit (4 days)

- . Identify problems and opportunities confronting organization.
- . Define management tasks associated with problems and opportunities.
- . Develop a preliminary program for organizational improvement.
- . Inventory available organizational knowledge and skill resources.
- . Determine gap between required tasks and available resources.
- . Define additional training needs of management team (self and staff).
- . Elect appropriate Management Development Modules.

II. Management Development Modules ($\frac{1}{2}$ - to 3-day elective modules
offered during a 2- to 4-month period)

General: Develop capability of management team to plan and implement change and to manage effectively by providing widely applicable concepts and skills:

- | | |
|-------------------------------|--------------------------------------|
| . establishment of objectives | . change planning and management |
| . problem analysis | . organizational analysis and design |
| . evaluation techniques | . management information systems |
| . management by objectives | . motivation and performance |
| . long-range planning | . time management |

Specialized: Develop capability to carry out specific elements of a program for improvement by providing specialized knowledge and skills:

- | | |
|--------------------------------|-------------------------------|
| . program management | . computer usage |
| . project planning and control | . program budgeting |
| . forecasting techniques | . cost-effectiveness analysis |
| . financial planning | . PPBS implementation |
| . proposal preparation | |

Career Development: Develop capability of second echelon administrators and potential administrators to manage more effectively and to plan for promotion:

- . general management
- . introduction to management

III. Organizational Unit (1-day unit bringing together the management team from each participating organization)

- . Prepare a final program for organizational improvement.
- . Confront the obstacles to change and the requirements for teamwork.
- . Develop a plan and a set of working relationships among administrators.

at the end of the Top Administrator Unit, which of their existing and potential second echelon administrators should be provided with training and which Management Development Modules are appropriate for them. At this point, the top administrators also decide which modules are appropriate for their own attendance.

The Management Development Modules are offered over a time period of sufficient duration to avoid undue burden on staff activities. They provide various administrators within each organization with a reasonable level of knowledge and skill in the management areas identified by the top administrator as necessary for organizational development. Each module will have a problem/action orientation and will produce, as one outcome, a participant-prepared plan of action relating the specific subject covered to broader organizational development needs. These plans of action, in turn, will establish the bridge to the third part of the program, the Organizational Unit.

In the Organization Unit, the top administrators and their second echelon administrators, who have participated in the various modules, join in a planning and team-building session supervised by instructors with expertise in organizational behavior and the process of planned change. The expected outcome of this unit, and of the IMOD as a total program, is the building of management teams (i.e., cadres of key administrators within particular organizations) that have:

- . related their newly acquired knowledge and skills to a mutually understood program for improved organizational effectiveness;
- . confronted and partially resolved some of the major obstacles to change; and
- . reexamined their working relationships and defined changes in these relationships that are required to bring about organizational effectiveness through improved management capability.

The three parts of the IMOD are described in more detail in the following sections.

Top Administrator Unit

This initial 4-day unit is limited to top administrators. Its function, in addition to the specific outcomes listed in Exhibit 2, is to provide the kind of training environment which will encourage and help participants to think in broad terms about organizational problems and objectives, the functions of the top administrator, and the process of organizational development and change. The unit also provides exposure to the management concepts and techniques that are available to participants when conceiving staff development plans.

This unit is, in a sense, a miniature version of the pilot Institute. Proportionately greater emphasis is given, however, to problem-finding, problem analysis, objective-setting, planning of change, and behavioral aspects of organizational development. More technical or sophisticated subjects, such as Planning, Programming and Budgeting System (PPBS) concepts and the Program Evaluation and Review Technique (PERT), are covered in less depth than they were covered in the pilot Institute; however, the option to explore these types of subjects in greater depth is available since the top administrators can elect to attend or send a subordinate to the Management Development Module covering a particular subject.

The 4-day requirement proposed for this unit is arbitrary. It represents an effort to alleviate the time burden imposed on top administrators and to increase the likelihood of their attendance. Although valid questions can be raised about the difficulties in achieving the expected problem definition, attitudinal changes, and commitment to change in such a short time period (particularly, considering the obstacles experienced during the pilot Institute session), other considerations tend to reduce the risks involved.

One consideration is the reduction in the range of organizational and program representations; i.e., the Top Administrator Unit would be limited to occupational education administrators from public schools, manpower programs, or community colleges, but these several types would not be mixed in one unit. As a result, it will be easier to focus on specifics and to develop participant cohesion as a group.

Another consideration is that it will be possible to proceed faster in future institutes of this type, whatever the specific design, because of the lessons learned in the process of developing and presenting the pilot Institute.

Finally, the Top Administrator Unit does not demand a single, substantial commitment to organizational change and new management approaches at one time. This initial unit is only a first step. Participants who wish to progress further do so at their own option by means of attending module sessions. The overall IMOD takes place over a period of several months, allowing the participant time for reflection and gradual progress toward a plan for improvement. The top administrator has ample time to shape this plan in a manner consistent with his pace, style, and priorities.

Management Development Modules

The concept of a series of Management Development Modules offered over a period of months is an application of the TMI recommendations concerned with providing more adaptability, building management teams, expanding the target population within organizations, providing more training per unit of formal session time, and increasing participants per session, where appropriate. As indicated in Exhibit 2, three types of modules are envisaged: general, specialized, and career development.

The General Management Development Modules address areas of knowledge and skills which are applicable to a variety of top and second echelon administrative positions. Some areas are generic, related to individual job tasks and performance; e.g., establishment of objectives, problem analysis, evaluation techniques, and time management. Others are concerned with managing people and conducting relationships with other managers; e.g., management by objectives and the planning and management of change. Still other areas involve concepts or techniques which have far-ranging implications for several aspects of organizations and how they function; e.g., long-range planning, organizational analysis and design, management information systems, and motivation and performance. Both top and second echelon administrators are prime candidates for training of this type.

Specialized Management Development Modules are concerned with types of knowledge and skills that are needed in varying degrees by different organizations depending on their

unique situation or that generally are needed by only one or two members of an organization. For example, organizations confronted with major building efforts have a critical need for skills in project planning and control, while other organizations may have less need, if any, for these skills. Most organizations need only one or perhaps two individuals with significant knowledge and skills in areas such as forecasting, use of the computer, or cost-effectiveness analysis. Thus, the specialized modules are useful and viable training packages which are needed in varying degrees by different organizations.

The Career Development Modules provide integrated management training for current second echelon administrators (General Management) and potential administrators (Introduction to Management). These modules serve the same function and deal with content similar to that of the Top Administrator Unit, but are aimed at the responsibilities, management functions, and career planning needs prevalent at lower organizational levels. They provide an integrated concept of job performance and the relationships of jobs to broader organizational functions that are difficult to achieve in the general and specialized modules. The primary role of these modules is to build future top administrators by helping teachers and other individuals not currently administrators to decide whether or not and how they should progress into administrative positions.

The various Management Development Modules fall into a number of design patterns in terms of duration, instructional methodology, prerequisite participant knowledge or experience, etc., depending on the degree of participant competence desired, the change in competence level of the typical participant required to achieve that outcome, and the nature of the subject matter. The number of modules and variables involved precludes specific treatment of individual modules in this report. It is possible, however, to generalize about several attributes of the modular design.

The impact and economy of most types of modules can be increased in several ways:

- . Because the modules are spaced out over time and the support of the top administrator is built into the program design, advance preparation can be assigned with reasonable probability that it will be accomplished.
- . Because the modules fit into a broader program of planned organizational development, participants will begin with high expectations that the training will be relevant and useful, and followthrough assignments and suggestions for further study are likely to be more realistic and effective than is typical.
- . For subject matter suited to treatment in large-class situations (e.g., where lectures and highly specified workshop or individual assignments are feasible), the cost per participant of formal sessions can be reduced.
- . Organizational burden can be alleviated by scheduling some sessions during weekends; e.g., several of the modules are suited to an intensive Friday-evening/Saturday session format.

The modules have two additional attributes. First, additional modules, seminars, or conferences can be offered during the 2- to 4-month period covered by this part of the Institute. New requirements, proposals, or ideas which state or federal officials wish to introduce or test could be built into the training program with mutual benefits in terms of specificity, integration, and impact. Second, many of the general and specialized modules will not be so limited to local concerns as to exclude beneficial participation by state and federal personnel who have needs for these types of knowledge and skills.

Thus, the modules listed on Exhibit 2 should be considered illustrative. Some could be deleted, others could be added, and within the lead times made possible by their spacing, new subject areas requested by participants in a given Top Administrator Unit could be developed and offered in the modular part of the same program.

Organizational Unit

The need for the Organizational Unit was determined in part during evaluation of the pilot Institute's outcomes and in part by general evidence during the Institute of the many problems involved in changing individual and organizational behavior. Pilot Institute participants gained new perspectives and learned new approaches difficult to apply upon return to organizations which had not been subjected to such new stimuli. Preparation of a plan of action was useful and effective, but did not ensure implementation.

Students of change commonly find that the first step in the change process is the most difficult, whether it is announcing a new planning requirement, the initial meeting with a subordinate or colleague with whom the participant wishes to relate in a new manner, or some other planned change. Obstacles are even more severe when the returning administrator desires to improve a variety of tasks which demand an integrated effort by many individuals in the organization. This situation is typically the case with the organizations and administrators being considered here. In such a situation, it is necessary, first, to prepare a coherent plan for utilizing newly developed capabilities in the formulation and execution of a many-faceted change program and, second, to work out the relationships required if the several administrators involved are to function as an effective management team in undertaking new, complicated, and interdependent tasks.

The proposed Organizational Unit serves this need by bringing together the administrators from all levels who participated in the previous parts of the Institute. If an average of five administrators were involved in each organization, for example, four to six different organizational representations could convene for an all-day session (perhaps offered on a Saturday to eliminate conflicts with administrative responsibilities). These participants will enter the Organizational Unit with new knowledge and skills (required in previous parts of the IMOD), a preliminary program for improvement (developed in the Top Administrator Unit), and plans of action for applying specific subject areas in participants' organizations (developed as part of the Management Development Modules).

The Organizational Unit addresses issues of integration, implementation, and followthrough as follows:

- . the obstacles to change from both outside and within the organization;
- . the problems of planning and managing a complex program aimed at several types of improvement;
- . the establishment of new working relationships and patterns of behavior associated with the change program; and
- . the further steps needed to continue the process of improvement in capabilities initiated in the IMOD.

Summary and Comparison

The IMOD reflects a change in Institute strategy toward building the capability of the management team within participating organizations; i.e., helping the top administrator plan for organizational effectiveness, providing both the top administrator and his key second echelon administrative personnel with the knowledge and skills needed to initiate action on the plan, and undertaking the initial first step in the process of planned change. The strategy also achieves greater effectiveness by providing more adaptability to the differing needs of particular organizations, enabling more individually paced work before and after formal sessions, and augmenting individual training through the reinforcing effect of mutual participation in a change-oriented training program by several members from given organizations.

In addition, the strategy provides opportunities to reduce costs of two types. First, the cost per participant of training may be reduced by providing for greater class size in certain modules and by trading off materials for instruction time. Second, through the separation of the Institute into units and modules, individual participants will spend less time in subject areas which are not keyed to their specific needs, and the total time required by top administrators can be reduced.

These and other elements of the proposed design are compared with the pilot Institute design on a more systematic basis in Exhibit 3. These elements are target population, duration of overall program, time spent in training

Exhibit 3

SUMMARY COMPARISON OF PILOT AND PROPOSED INSTITUTE DESIGNS

Design Element	Pilot Institute	Proposed Institute
<u>Target Population</u> Top Administrator Unit Management Development Modules Organizational Unit	Top administrators at local level (vocational education and manpower training), community college representatives, state level personnel.	Top administrators at local level (vocational education only); state level personnel as interested-party participants. Top administrators, subordinate administrators, and/or potential administrators, depending on nature of subject. (Participants from outside the occupational education system may be possible in some units.) All who participated in above units from a particular organization (including top administrators).
Duration of Overall Program (Time elapsed from beginning of first to end of last training session)	Three weeks.	Two to six months.

Exhibit 3 (Continued)

Design Element	Pilot Institute	Proposed Institute
<u>Time Spent in Training Sessions by Top Administrators</u>		
Required Time	Two weeks.	One week (4-day Top Administrator Unit and 1-day Organizational Unit).
Optional Time	None.	20-30 days (in 1- to 3-day modules).
<u>Participant Selection Criteria</u>		
Top Administrator Unit	Top administrators.	Top administrators.
Management Development Modules	None.	Varying; depends on type of module, but all participants selected by top administrator.
Organizational Unit	None.	Selected by top administrator.
<u>Training Evaluation Criteria</u>		
Top Administrator Unit	. Participant plan-of-action accomplishments. . Participant assessment of benefits received. . Participant assessment of Institute.	. Participant specification of organizational problems and objectives to pre-established criteria. . Participant ability to specify management training needs within his organization. . Participant assessment of unit.

Exhibit 3 (Continued)

Design Element	Pilot Institute	Proposed Institute
Management Development Modules	None.	. Test (where feasible). . Individual contribution to overall program as assessed by top administrators. . Participant assessment of module.
Organizational Unit	None	Completion of prescribed planning and relationships document.
Overall Institute	Same as for Top Administrator Unit.	. Post evaluation of change accomplished and planned change in progress. . Participant assessment of overall Institute.
<u>Target Number of Participants per Session</u>		
Top Administrator Unit	Approximately 30.	Approximately 30.
Management Development Modules	None.	Vary by subject matter and instructional method; range from 20 to 50.
Organizational Unit	None.	Approximately 30.

sessions by top administrators, participant selection criteria, training evaluation criteria, and target number of participants per session. In this exhibit, the Top Administrator Unit of the proposed Institute is regarded as equivalent to the pilot Institute.

An earlier version of the proposed design was discussed with a sample of pilot Institute participants during the field interviews. The participants were not asked to make a detailed evaluation, but rather to provide a general opinion of the design changes and an indication of whether or not their organizations would be interested in this kind of program. All participants expressed a favorable opinion of the proposed design and indicated that their management staff members would be potential participants in such a program. It should also be noted that several administrators who were invited to the pilot Institute declined on the grounds that two weeks was more time than they could afford to spend and that their subordinate management personnel were, in their opinions, the ones who needed the training.

Appendix A

PROJECT PLAN

The project plan, submitted as a working paper in September 1970, was described as follows:

"This working paper outlines the actions which Technology Management Incorporated (TMI) plans to take in managing the contract for planning, developing, presenting and evaluating a management development training technique for occupational education administrators.

* * * * *

"The plan divides planned activities into phases and shows the expected completion dates for each activity. Some activities are not clearly divisible into separate phases, since each phase and each activity is a related part of an integrated plan. Nevertheless, the planned arrangement of activities within phases is a useful management tool that meets the needs of our professional staff.

* * * * *

"As the project progresses and events occur that make revisions in the plan advisable, changes will be made. The Department will be kept advised of such changes in coordination meetings and progress reports."

PHASE I. INSTITUTE PLANNING

	<u>Scheduled Completion Date</u>
A. Reach internal agreement on commitment of personnel to project	Aug. 3, 1970
B. Assemble publications and management materials available in TMI and professional staff libraries	Aug. 10, 1970
C. Review of project requirements with Department Project Officer	Aug. 14, 1970
D. Complete staff familiarization with proposal, contract, and revised statement of work	Aug. 21, 1970
E. Order additional publications and teaching materials	Aug. 25, 1970
F. Conduct coordination interviews with the Department	Aug. 25, 1970
G. Complete background orientation on legislative background and familiarization with selected occupational education studies at national and state levels	Aug. 28, 1970
H. Prepare initial bibliography as preliminary guideline for research, data collection, and preliminary design	Aug. 31, 1970
I. Conduct initial interviews with several occupational education administrators in a variety of educational settings	Sept. 2, 1970
J. Complete Project Plan and submit copy to the Department*	Sept. 3, 1970

*Note: The Project Plan is an internal TMI working document which will be continuously updated during the course of the project to reflect any changes that may be required.

PHASE II. RESEARCH AND DATA COLLECTION

	<u>Scheduled Completion Date</u>
A. Using the initial institute structure and similar parameters developed under the Preliminary Design Phase, identify research and data collection priorities	Sept. 11, 1970
B. Obtain from the Department Project Officer a review of the "other related management development programs for educational administrators" that have been completed or which are being developed in the Commonwealth	Sept. 11, 1970
C. Provide assistance to the Department in the selection of a site for the institute	Sept. 18, 1970
d. Assist the Department in preparing for the solicitation of possible participants and in defining desirable participant profiles	Sept. 15, 1970
E. Prepare questionnaires for participants	Sept. 23, 1970
F. Complete interviews with typical occupational education administrators and other key individuals as necessary to complete definition of management problems and goals, and to develop outline of local budgeting and planning cycle, specify decision points, and identify related intergovernmental programs, funding, and relationships	Sept. 25, 1970
G. Make Library search on key subjects to assure that all critical material is identified and updated	Sept. 29, 1970

	<u>Scheduled Completion Date</u>
H. Prepare summary descriptions of the intergovernmental processes involving programs, funds, planning requirements, and grant applications in occupational education and related areas of interest	Sept. 29, 1970
I. Identify any required publications that are not already available and place additional orders for those that are required	Sept. 30, 1970
J. Prepare description of forecasts and similar materials that are available to occupational education administrators; outline techniques of forecasting in use by the Bureau of Labor Statistics, the Office of Education, and such other national, state, or local agencies that have well established techniques related to occupational education, manpower needs, skill requirements, or technological change	Sept. 30, 1970
K. Prepare working bibliography in draft form	Sept. 30, 1970

PHASE III. PRELIMINARY DESIGN

Scheduled Completion Date

- | | |
|--|----------------|
| A. Establish the initial institute structure, including selection of the subjects to which major attention will be devoted; tentatively assign blocks of time for consideration of each subject during the institute | Sept. 10, 1970 |
| B. Prepare outline of cases, workshop materials, and other specially designed materials; identify teaching objectives and techniques | Sept. 28, 1970 |
| C. Mail questionnaires to participants | Oct. 2, 1970 |
| D. Prepare list of materials to be purchased and furnished to participants | Oct. 14, 1970 |
| E. Review and analyze returned questionnaires to the extent possible prior to completion of preliminary design | Oct. 14, 1970 |
| F. Submit the preliminary design of the institute to the Department for comment | Oct. 16, 1970 |

PHASE IV. FINAL DESIGN

	<u>Scheduled Completion Date</u>
A. Review preliminary design with the Department, TMI consultants, and such others as may be necessary	Oct. 23, 1970
B. Complete analysis of questionnaires and interviews	Oct. 23, 1970
C. Complete final institute design, document it, and deliver copies to the Department	Nov. 2, 1970

PHASE V. DEVELOPMENT AND PREPARATION

	<u>Scheduled Completion Date</u>
A. Order any additional publications, audio-visual materials, equipment, or other supplies required for the institute	Nov. 16, 1970
B. Prepare cases, workshop detail design, and other teaching materials required to carry out the teaching objectives and the teaching techniques specified in the final design	Nov. 23, 1970
C. Conduct internal quality review of institute content and presentation techniques and review with TMI consultants	Dec. 1, 1970
D. Make all changes necessitated by the quality review	Dec. 8, 1970
E. Reproduce all teaching materials required for the use of instructors and assemble the package of materials to be delivered to each participant	Dec. 11, 1970
F. Mail such material to participants which may be required for familiarization purposes before they come to the institute	Dec. 14, 1970

PHASE VI. INSTITUTE PRESENTATION

	<u>Scheduled Completion Date</u>
A. Present the institute for the first week, beginning on January 4, 1971*	Jan. 8, 1971
B. Provide problem materials to participants for study during the week of January 11, 1971	Jan. 8, 1971
C. Present the second week of the institute during the week of January 18, 1971	Jan. 22, 1971

*Note: Inasmuch as the scheduled beginning date of January 4, 1971 follows a ten-day school holiday, it may be advisable to start the institute on January 11, 1971. TMI will recommend this change in discussions with the Department Project Officer during the week of September 7, 1970.

PHASE VII. INSTITUTE EVALUATION AND
PLANNING RECOMMENDATIONS

	<u>Scheduled Completion Date</u>
A. On the last day of the second week of the institute, obtain an evaluation of the institute by the participants and by the TMI instructors	Jan. 22, 1971
B. Complete initial draft of planning recommendations	March 1, 1971
C. Prepare and mail follow-up questionnaires to participants	March 12, 1971
D. Conduct any follow-up evaluation interviews that may be needed	March 24, 1971
E. Complete review and analysis of evaluation information	March 30, 1971
F. Prepare institute evaluation and planning recommendations for inclusion in final report	April 5, 1971

PHASE VIII. PROJECT COORDINATION AND
FINAL REPORT

	<u>Scheduled Completion Date</u>
A. Reach final agreement with the Department Project Officer on desirable participant profile	Sept. 10, 1971
B. Arrange project coordination and review meetings with the Depart- ment Project Officer	Minimum of One Per Month
C. Prepare and deliver summary-type progress reports	Sept. 4, 1970 Oct. 16, 1970 Dec. 4, 1970 Jan. 29, 1971
D. Prepare and submit final report (which will include final biblio- graphy, institute evaluation, and planning recommendations)	April 12, 1971

Appendix B
LETTERS OF SOLICITATION

B.1



DIVISION OF
OCCUPATIONAL EDUCATION

The Commonwealth of Massachusetts
Department of Education
182 Tremont Street, Boston 02111

November 13, 1970

Dear

A two-week Management Institute, in development for more than five months, will be presented at the Village Green in Danvers the second and fourth weeks in January 1971. This letter is your invitation to participate in the Institute with other selected occupational education and manpower training administrators.

The Institute is timely, interesting and practical. It is keyed to the climate of change which we are experiencing in occupational education and manpower training programs. It recognizes that priorities are changing, that expectations are increasing, and that all of us are having a hard time stretching our resources to keep pace with needs.

Already pressed by the demands of today's changes, the administrator is being challenged by requirements for accountability for results. More than ever, during the coming decade, the effective administrator must have a growing capability for using the best available planning techniques and management methods in the direction of occupational education and manpower training programs. The effective administrator in the 1970's must be a good manager as well as a good educator.

Recognizing the effect of these changes and demands and the importance of the use of the best available techniques in the management of occupational education and manpower training programs, the Division of Occupational Education decided to seek an effective means of helping Massachusetts administrators cope with the planning and management of their programs. With the assistance of the

B.2

-2-

November 13, 1970

U.S. Office of Education under the provisions of the Education Professions Development Act, the Division engaged a technical and management services firm, Technology Management Incorporated (TMI), to plan, design, develop, and present a Management Institute to help meet occupational education and manpower training needs in Massachusetts. The Institute has been specially developed to provide administrators with practical experience in applying the best available management technologies to the needs and problems of occupational education and manpower training. A complete description of the Institute is provided in the enclosed prospectus and letter prepared by TMI.

The Division, in cooperation with TMI, has selected a limited group of administrators who are being invited to attend the Management Institute. Several participant categories have been established, and acceptances in each category will be confirmed on a "first come, first served" basis.

This invitation is an unusual professional opportunity for you and your institution. Substantial efforts have been dedicated to developing an Institute tailored to your specific interests. Your participation will be an excellent investment of your time.

We urge you to return your acceptance as soon as you can.

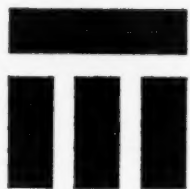
Sincerely,

John W. Fitzgerald
Operations Officer

John P. Morine, Senior Supervisor
and Project Officer

Enclosures:

- (1) Two copies of TMI letter signed by C. Wade Tambor, plus prospectus describing the Management Institute
- (2) Acceptance form and return envelope



TECHNOLOGY MANAGEMENT INCORPORATED

November 13, 1970

Dear

The professional staff of Technology Management Incorporated (TMI) looks forward to your participation with us in the Management Institute at the Village Green in January. The program will be problem-centered, results-oriented and, we believe, most relevant to your particular interests and concerns.

The Department of Education letter inviting you to participate in this Management Institute expresses the support of the Division of Occupational Education. Others who have reviewed the program have also been receptive. We have reviewed the objectives, content, and approach to the program with Dr. Charles Buzzell, the newly-designated Associate Commissioner for Occupational Education, and Mr. Joseph Martorana, State Chairman for CAMPS. Both men endorse it and plan to participate in portions of the Institute.

The enclosed prospectus provides a fairly comprehensive description of the Institute. I would like to add an informal summary of several points which I believe are particularly important.

- . First, this is not a "general" management program; it is a program developed specifically for occupational education and manpower training administrators. Sufficient development time and resources have enabled TMI to explore your problems and tailor the Institute accordingly.
- . Second, the framework of the Institute has been developed up to now on the basis of research and a field interview series conducted among a number of occupational education and manpower training administrators. Continued preparation will take place wherein further definition of the specific needs of those who will actually participate will be obtained through additional interviews and questionnaires.

November 13, 1970

- . Third, the Institute format is not the common, symposium-oriented series of speeches by "experts" interspersed with "panel discussions" (a format that usually does not provide the participant with the practical knowledge and skills that he can use effectively). Rather, this Institute incorporates a variety of learning mechanisms to facilitate your personal involvement and to give you hands-on experience in the application of new concepts and methods to real problems. The number attending will be limited so that everyone will be a participant rather than a spectator.
- . Fourth, participants have been selected with their potential contributions in mind. A mixture of administrators with different backgrounds will attend. The experiences and ideas which you can share with one another will enrich the Institute sessions and give a better perspective to the problems and techniques which are to be considered.
- . Fifth, the Institute is oriented toward achieving immediate, practical results. The Commonwealth's investment in the development of the Institute and the two weeks you invest should begin to pay dividends within the year. The Institute is designed to assure that you receive benefits in terms of job performance that exceed the value of your time investment in the Institute.
- . Finally, we believe that TMI's background and the capabilities of its instructional team will bring an important managerial dimension to the Institute which will be of special value to you. TMI specializes in the practical application of advanced methods and techniques to the management of organizations and programs in both private and public agencies. Our instructional team is a group of experienced business managers and management educators; they are not novices, but are pragmatic men who will work with you in dealing with problems on a down-to-earth basis.

-3-

November 13, 1970

We strongly believe in the contribution that the Institute can make to you and your organization. We hope that you will share our enthusiasm and that you will be among the participants.

I might add that the food and accomodations at the Village Green are excellent. You will note that your food, lodging, and travel expenses will all be paid. In addition to the professional satisfaction you will gain from the substantive content of the Institute, I am sure you will thoroughly enjoy the amenities of your two weeks at the Village Green.

We will be pleased to have you join us as a participant in the Institute. To assure your participation, you should sign the acceptance form and return it promptly in the stamped, addressed envelope which is enclosed. I look forward to meeting you personally in January.

Very truly yours,

TECHNOLOGY MANAGEMENT INCORPORATED

C. Wade Tambor
Executive Vice President

CWT/mg
Enclosure

B.6

Appendix C
INSTITUTE PROSPECTUS

C.1

TECHNOLOGY MANAGEMENT INCORPORATED

MANAGEMENT INSTITUTE

FOR
EXPERIENCED
OCCUPATIONAL EDUCATION
AND
MANPOWER TRAINING
ADMINISTRATORS

SPONSORED AND FUNDED BY

MASSACHUSETTS DEPARTMENT OF EDUCATION
DIVISION OF OCCUPATIONAL EDUCATION

AND

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
OFFICE OF EDUCATION
BUREAU OF EDUCATIONAL PERSONNEL DEVELOPMENT

DEVELOPED AND CONDUCTED BY



TECHNOLOGY MANAGEMENT INCORPORATED

CAMBRIDGE, MASSACHUSETTS

WASHINGTON, D.C.

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Title VI of the Civil Rights Act of 1964 states:
"No person in the United States shall, on the
ground of race, color, or national origin, be
excluded from participation in, be denied the
benefits of, or be subjected to discrimination
under any program or activity receiving Federal
financial assistance." Therefore EPDA programs
must be operated in compliance with this law.

PROGRAM BACKGROUND

In August 1970, the Massachusetts Department of Education engaged Technology Management Incorporated to conduct an eight-month program to design, develop and conduct a two-week Management Institute for Experienced Occupational Education and Manpower Training Administrators. Funded partly by the Department of Education and partly by the U.S. Office of Education under the Education Professions Development Act, the Institute has been planned and designed specifically to meet the practical needs and problems of experienced administrators who face the challenge of planning and managing education and training programs in the changing environment of the 1970's.

PARTICIPANTS

Participants have been selected from administrators in the following types of organizations:

- . Commonwealth departments and agencies concerned with occupational education and manpower training programs
- . Occupational education organizations in city and regional schools and community colleges
- . Manpower training organizations

Institute enrollment will consist of a limited number of selected administrators to ensure emphasis on practical application and concrete results.

THE MANAGEMENT PROBLEM

The overall effort to develop and conduct the Management Institute is aimed at the problems faced by the occupational education or manpower training administrator in his role as manager, as distinguished from his role as a professional in education or training.

Management, in the current environment of occupational education and manpower training, means dealing with demands to provide a wider range of skills and occupational preparation to a greater proportion of the population. It means dealing with pressures to provide more programs to meet the needs of special groups, such as the disadvantaged and handicapped. It means obtaining the resources to support on-going and new programs in an increasingly complicated and competitive intergovernmental funding environment. The management problem, in broad terms, is meeting these demands for growth and change, with all the problems of funding, program innovation and administrative adjustments they require, while at the same time maintaining and improving traditional programs and dealing with the wide range of tasks and activities which any administrator faces in running an organization.

The management problem in occupational education and manpower training has increased in the recent past. It is likely to grow in the future. This is clear from examining the trends, and it is clear from what administrators have expressed in a series of interviews.

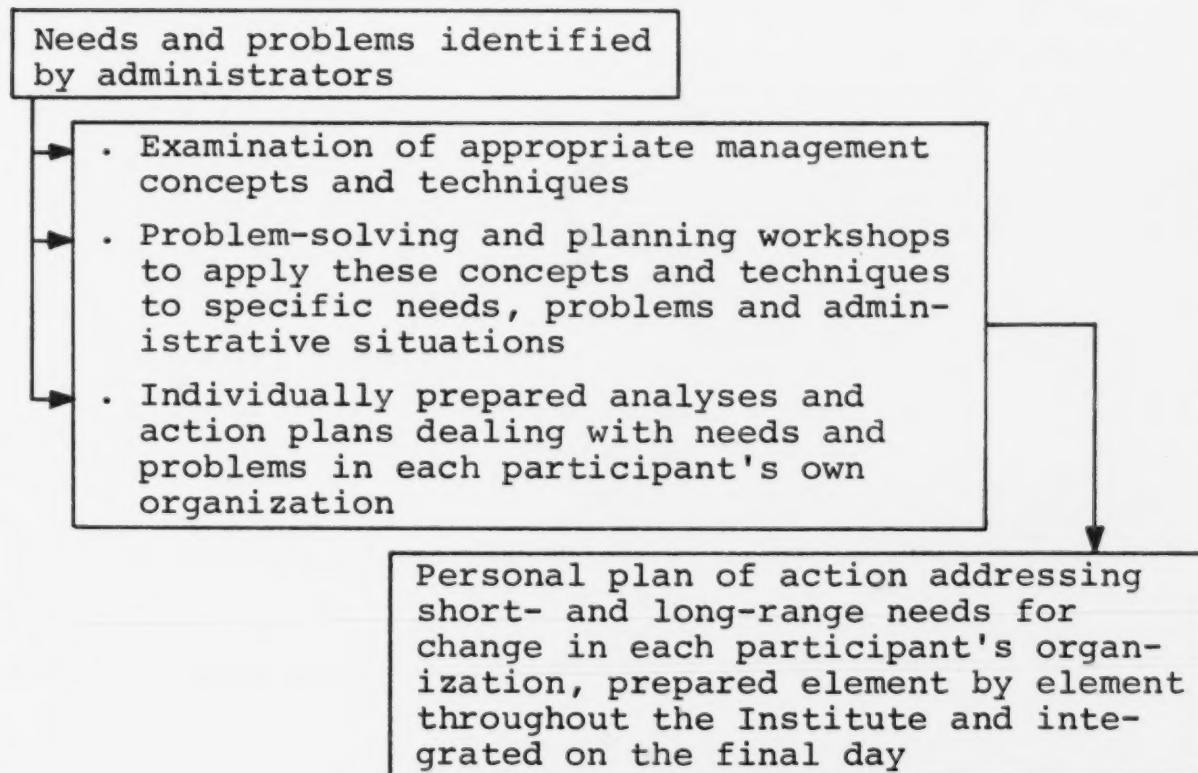
OBJECTIVES

The purpose of the continuing development effort for the Institute is to identify useful management approaches for dealing with this broad management problem and the many specific problems it encompasses. The Institute itself will focus on aids to management, both those which have special applicability to the problems in this field, and those that have been found useful in dealing with similar problems experienced by managers in a wide variety of fields.

The objectives of the Institute are to help occupational education and manpower training administrators to: apply the best available management concepts and techniques to the analysis and solution of a wide variety of problems; gear education and training programs to changing technologies and skill needs; deal with the psychological and sociological influences that affect programs for special needs populations such as the disadvantaged and handicapped; identify and utilize the variety of available governmental programs; and manage organizations which must adapt to rapid changes and entirely new requirements while continuing to operate a variety of current programs and functions effectively.

APPROACH

The Institute approach is to build substantive content around the needs and problems identified by participating administrators in pre-Institute surveys and further defined during the Institute, within a systematic framework for problem-solving, planning, and organizational change. The Institute objectives will be achieved by moving from problem identification at the outset to planning for change in participants' own organizations at the conclusion. The Institute approach can be expressed in diagram form as follows:



The instructional methods employed in carrying out the Institute approach will include workshops, individual task assignments, role playing, case studies and exercises, computer simulations, presentations, and class discussions. The methods used are action-oriented. Problem definition, planning and problem-solving sessions are designed so that each participating administrator can become personally and directly involved in working on realistic problems relevant to the needs of his own organization.

CONTENT

The preceding description of the overall approach and the kinds of methods employed in the Institute indicates the focus and integrating theme of the Institute. The substantive content of the Institute is structured into four segments in a similar way: first, defining and analyzing the critical problems and needs faced by administrators in a complex and changing technological and organizational environment; second, examining current and potential new programs aimed at meeting occupational education and manpower training needs, and exploring various means to evaluate, change, improve, develop and fund the programs; third, analyzing the opportunities for improved management of occupational education and manpower training programs and organizations; and finally, the challenge of taking specific action on plans and ideas which participants have had in mind or have developed during the Institute. The time allocations given to the four segments are roughly as follows:

I. Problems and Needs	3 days
II. Programs	3 days
III. Management	3 days
IV. Action	1 day

The structure and content of each segment follows. Discussion of the material to be dealt with is presented under the various sections within each of the four segments. The discussion is selective and illustrative and does not attempt to present complete details on a session by session basis. Rather, descriptions for each section are presented to provide the reader with sufficient knowledge of the total Institute content so that he may assess its completeness and its relevance to his interests.

PROBLEMS AND NEEDS

Defining Problems and Needs

Administrators have expressed concern about a wide variety of problems. Some problems involve the programs their organizations are offering: Are they the right ones, or does the mix of programs require change? Which programs

should be cut back or expanded, and which new ones should be added? Other problems involve limited resources: Where and how can the funds required to meet new needs be obtained? What action can be taken to obtain more results from existing budgetary and facility resources? Still other problems involve getting things done: What steps can be taken to obtain staff attention to change and improvement, as well as to operation of existing programs? How can periodic requirements, such as development of new programs, preparation of the annual proposals and budgets, and so forth, be planned and controlled to avoid disrupting the organization?

In this section, many needs and problems which concern participating administrators will be examined in terms of their priority, their interrelationships to one another, and the degree to which they are common or unique to each participant. The set of problems which participants identify individually and as a group will establish a target for the Institute. The remainder of the Institute will be devoted to progressing, as far as possible, toward analyzing these problems, developing alternative solutions to them, and preparing plans for dealing with them.

Solving Problems

A great deal has been written and spoken about "problem solving," and much of it has been academic, exaggerated in its claims, and of little use to the manager faced with real problems in a complicated administrative setting. There is no question that problem solving is largely the application of common sense and experience. At the same time, managers in many fields have found certain processes to be helpful to them in dealing with real problems they face. There is a general problem solving process, in the sense that certain steps must be performed in a fairly systematic manner if solutions consistent with central organizational objectives are to be discovered. There are more specialized processes appropriate to specific types of problems, such as choosing one from among two or three possible new course offerings, obtaining more output from a program with a fixed budget, or allocating new funds or space among several areas of need.

In this section, these problem solving processes and methods are explored and matched up with the kinds of problems identified by participants as important ones. Some specific problems will be systematically analyzed in

working sessions, and a general approach which administrators can apply to other problems during the remainder of the Institute will be presented and discussed.

Analyzing and Projecting Occupational Education/Manpower Training Systems

Occupational education and manpower training administrators are involved collectively in a broad public program to meet a wide variety of requirements for skills and to provide skills to a wide variety of population groups who need them. Consequently, there are common types of problems faced by all administrators, and the problems of each administrator and each type of educational or training organization tend to have some effect on the problems experienced by others. Where this kind of interdependency and commonality exists, it is typically useful to examine the whole set of needs, resources, organizations and relationships among organizations as a "system."

In this section, the "system" concept and the technique of "systems analysis" will be examined, not as an academic exercise but rather as a means of placing problems in a practical perspective that will be useful in developing alternative ways of dealing with them. Systems analysis can be and frequently has been oversold. On the other hand, it has proved able to reveal, in many circumstances, alternative approaches which were not apparent by any other approach. It will be examined and applied with both strengths and limitations in mind.

Another subject covered in this section will be the problem of forecasting the future. Which technologies and industries will grow, which will decline, and which new ones will emerge? What skills and jobs will be associated with these technologies and industries? How will the occupational needs of various population groups develop? Both the system concept and a series of techniques for forecasting the future in ways that feed into the planning process will be explored. These techniques range from statistical techniques, to the means for systematically assembling and integrating the judgments of experts in various areas. In each instance, the practical usefulness will be the focus. Can administrators employ this technique with the resources and staff competence at their disposal? How will the results aid in making decisions and supporting program and budgetary proposals? What, if anything, can be done to improve forecasts in highly uncertain but very critical areas,

such as the amount of funds that may be available in future years? What can the administrator do to improve the very specific forecasts of industry and population needs he requires for his own local service area? What effect may probable trends have on the roles of various organizations, and the relationships administrators may need to develop among one another?

PROGRAMS

Planning an Organization's Programs

The reason administrators seek better ways of understanding the system in which their organization fits and forecasting the future is, of course, to provide a better basis for planning the programs of their organizations. The administrator needs to evaluate how well his current programs meet the needs to which they are addressed; to determine what steps should be taken in cases where changes are required; to identify what is needed to cope with future developments which seem apparent; and so forth. Program planning involves these general decisions and the various specific decisions as to budget, staff, facilities, equipment, curricula, etc., which are associated with them.

In this section, the task of program planning in occupational education and manpower training will be examined; specifically, how participating administrators perform this task, and the difficulties they experience; the usefulness of a systems approach to planning both new programs and means of restructuring existing programs to obtain more output; and the potentiality and limitations of new kinds of planning systems. Two subjects will receive emphasis. First, computer-assisted planning techniques have been developed in recent years. They enable administrators to test the effectiveness and future impact of a variety of alternative changes to their organizations' programs and resources. A session will be devoted to obtaining "hands-on" experience with a computer-assisted educational planning technique.

Second, the Planning, Programming, Budgeting System (PPBS) will be examined. Like other approaches that have been mentioned, this is a controversial innovation. It is clear, however, that PPBS in some form is coming to

Massachusetts government and that, increasingly, proposals for funding to the Commonwealth and Federal Governments must contain information and analyses prepared with the use of PPBS techniques and arranged in PPBS formats. PPBS will be examined in the Institute from the standpoint of first, these evolving requirements and, second, the usefulness to administrators of the various concepts and techniques which make up the system.

Analyzing and Designing Programs

A special form of problem solving (and a basic element of the PPBS) is the set of concepts and techniques generally called "program analysis." Program analysis is concerned with the kinds of administrative decisions associated with meeting a particular need in the most effective and efficient way, obtaining the greatest possible outputs and results from a given mixture of resources (i.e., funds, facilities, staff, equipment, etc.), or allocating given resources among various programs in a manner which will produce the greatest impact in terms of the organization's overall objectives.

In this section, the concepts and techniques of program analysis will be examined. The usefulness and limitations of program analysis, as it may be applied to various kinds of occupational education and manpower training programs, will be explored, and particular attention will be directed toward how program analysis can be helpful in establishing a basis for soliciting funding support.

Emphasis will be devoted to two types of programs: educational and training programs aimed at the economically and socially disadvantaged population, which is obviously the chief concern of manpower training administrators and a major and growing concern of occupational education administrators; and programs aimed at the handicapped population, an area of concern to all administrators.

The common needs of these population groups and the impact of these needs on program and organizational design will receive major attention.

Developing and Funding Program Proposals

Administrators share a conviction that "not enough money" is the major obstacle (and "more money" the major solution) to the execution of the kinds of plans and changes they would like to carry out in their organizations. Program analysis can assist in deciding what should be done and developing evidence to convince those who control resources that it should be done. But the problem of developing and obtaining funding support for program proposals in a complex, competitive intergovernmental environment involves many additional administrative, procedural, personal and public relations factors.

In this section, attention will be directed toward the problem of gaining support for programs; that is, identifying specific sources of program funding; defining the formal and informal procedures for solicitation and approval; and preparing effective proposals and proposal submission strategies that are geared to the requirements, goals and preferences of those who participate in acceptance or rejection. Specific proposal strategies and outlines of substantive content for proposals in areas of common interest will be prepared in working sessions. The coverage of this subject will, on the one hand, deal with those common elements of the development and funding process which have implications for how any proposal is prepared. It will, on the other hand, deal with unique problems facing administrators in particular types of organizations through the use of specialized working sessions; for example, the more direct role of the Federal Government in many manpower training programs, the different administrative structures faced by various occupational education administrators, and the special problems presented by school committees and finance committees in the current economic climate.

MANAGEMENT

Managing Organizations in the Process of Change

Administrators in this era are continually being pressured from various directions to institute changes in what they and their organizations are doing. Many of these changes have been analyzed in the Institute. This pressure for change suggests that the administrator should learn more about what the impact of change on his organization might be and how he can manage the process of change. In this section, the dynamics of change processes and the specific demands placed on the role of the administrator will be examined, including the unique opportunities and difficulties that are involved in the planning and management of change in various organizational settings.

Organizing, Planning and Controlling Programs and Institutions

Administrators' activities are devoted to a variety of different kinds of purposes: providing executive leadership to the organization as a whole; keeping on-going programs functioning efficiently; instituting changes in organization, procedures or assignments designed to improve effectiveness; initiating new programs and task assignments to meet new needs; and so on. While the need for effective organization, planning and control are common to all of these several kinds of activity, the appropriate techniques vary. In this section, management approaches and techniques which have been found useful in dealing with different kinds of organizational activity will be examined.

There are, for example, techniques that can assist the administrator in planning and measuring progress on tasks which are not routine, regular functions, but rather occur from time to time and, frequently, involve many members of the organization's staff; e.g., the annual budget, proposals, new programs, new facilities, or major administrative changes. The organization and management of such tasks as "projects" will be examined, along with the utilization of planning and control techniques such as "PERT."

Managers in many fields employ a concept and approach, generally called "program management," to provide administrative emphasis and visibility to areas of activity which

have particular importance during a certain period of time, or which cut across the normal functional assignments within an organization. The use of program management will be examined in terms of its applicability to new programs during their period of testing and experimentation, in particular to programs for special groups, such as the handicapped, in which many staff members may be involved in a new and different kind of experience.

An important objective of management is, of course, the increase of organizational efficiency. To improve the relationship of organizational outputs to inputs, the administrator must be able to manage these inputs better. To help him do this, he needs better management information with which to plan and make decisions. What information does he need? In what form should he receive this information? From where and how easily can it be collected? By what techniques and methods should the information be processed? These questions will be explored in the Institute with emphasis on concepts and approaches for designing and using management information systems and for deciding the role that computers may play in these systems.

Building Managerial Skills and Effectiveness

Whether as part of a specific organizational challenge to change, or simply the general desire to improve organizational effectiveness, most managers are interested in concepts and techniques which may help them develop their own managerial skills, the capabilities and skills of their subordinates, and the overall competence of their organizations. How can an administrator maximize the usefulness of his own time? How can he delegate more of his administrative duties and responsibilities? How can he find and use more effective means to motivate his people to higher levels of performance? How can he better recognize and reward improvements in performance in his subordinates? How can he utilize his own managerial skill and style of leadership to aid the development and growth of the individuals in his organization? There are no rules or panaceas, but there are useful concepts and approaches to these kinds of questions. This section of the Institute will focus on the contributions that management theory and the behavioral sciences can make to management and organizational development.

ACTION

Anticipating Obstacles to Change and Innovation

Most administrators will have come to the Institute with ideas for change and innovations in their organizations. If the Institute has been successful, new ideas and plans will have taken shape in the many preceding sections. In this section, the organizational obstacles to change and administration will be examined, both in general and in particular kinds of administrative situations. The administrator may find, for example, that successful implementation of change or innovation requires that: new ways be discovered to utilize some of his staff, whose scope of responsibilities have been reduced by a shift of priorities among programs or functions; individual staff members, or groups of staff members, may resist taking on new responsibilities; programs directed toward new needs may involve individuals and groups with interests and attitudes so different that they disrupt on-going activities; and so forth. The means to design effective strategies for dealing with these and other obstacles to change will be examined, with emphasis on the identification of likely problems and the preparation of specific plans for minimizing their impact.

Developing Personal Plans of Action

The Institute theme, applied in each section, is the specific, practical application of management approaches and techniques to occupational education and manpower training administrators' problems, programs and organizations. In this section, the theme is pulled together with the preparation by each participant of a systematic plan of action which will be designed to express the ideas, decisions and plans he has developed throughout the Institute in a format which will guide his efforts to achieve results during the months that follow.

Evaluating the Institute in an Action-Oriented Framework

This Institute is organized to bring together key administrators, from diverse organizational situations but having similar goals and problems, in a format designed to focus on action and results. It emphasizes the practical

exploration of new management concepts and approaches, and the sharing among participating administrators of experiences and ideas relevant to their common problems and situations. In this final section, participants will be asked to evaluate the effectiveness of the Institute from the standpoint of their own objectives and interests, and to recommend ways in which this type of Institute can be useful—as it has been presented or with modifications—to meet additional management needs of administrators at various levels in occupational education and manpower training.

INSTRUCTORS

The next several pages provide brief biographical sketches of the management backgrounds of the Technology Management Incorporated professional personnel who have been engaged in the development of the Institute and who will be members of the Institute's instructional team.

It should be emphasized, in addition, that in a program of this type each participant will render important contributions through the experience, expertise, problems and ideas that he brings to the Institute and shares with other participants. The different backgrounds and responsibilities of participating administrators representing occupational education programs and manpower training programs at the state and local level will help to assure that needs and problems are addressed in the appropriate perspective.

Donald C. Carroll

Mr. Carroll, President of Technology Management Incorporated, holds the Bachelor of Science degree in mathematics from the University of North Carolina and the Master of Science and Doctor of Philosophy degrees from the Massachusetts Institute of Technology Sloan School of Management. For the past decade, Mr. Carroll has been in the forefront of research and development of advanced management planning and control systems. He is internationally recognized for his contributions in the development and application (in a variety of industrial environments) of model-based information systems. During this time, he has been engaged in an extensive variety of consulting as well as teaching assignments involving information technologies which are conceptually analogous to those relevant to participant needs and Institute objectives.

Mr. Carroll was one of the original founders of the highly successful two-week training program in management information systems which is sponsored by M.I.T. each summer. For the past six years, he has served as a member of the teaching staff of this program. In addition, he has participated in presenting management information and other management technology institutes in various settings throughout the United States and abroad.

L. Wallace Clausen

Mr. Clausen holds the Bachelor of Arts degree in economics from Swarthmore College and has a Master of Business Administration degree from the Harvard Business School. He has extensive experience in developing and conducting management-oriented seminars for industrial firms and government agencies and has taught Planning, Programming, Budgeting System concepts at M.I.T. He has been engaged in consulting studies for numerous organizations, including the U.S. Bureau of the Budget, and is currently conducting research on business-government relationships in the provision of services such as education and training.

Paul V. Croke

Mr. Croke holds the degrees of Bachelor of Arts and Master of Business Administration from Boston College and Doctor of Philosophy from Rensselaer Polytechnic Institute. He is Associate Professor of Management at Northeastern University, teaching courses in organizational behavior and business policy.

Mr. Croke's ten years' experience in management consulting have encompassed a wide variety of assignments. During the last four years, much of his consulting work has been involved with both policy formulation and management processes for governmental organizations at the federal, state, and local levels. He has developed and conducted a number of training programs aimed at improving management in the public sector. Prior to entering management consulting, he had a number of successful years in management positions in industry.

James McIntyre

Mr. McIntyre holds the degree of Bachelor of Science in political science from Florida State University. He has maintained an association with the Quincy, Massachusetts, schools since 1967, when he developed a research and training program for Broadmeadows Junior High School while a member of the Harvard Graduate School of Education's Achievement Motivation Development Project. Since that time, he has continued the relationship in various advisory and consultative roles. He is presently directing the M.I.T. program for teaching assistants in urban education and is co-author of three books on psychological education.

Collin W. Scarborough

Mr. Scarborough, a Vice President of Technology Management Incorporated (TMI), has a Bachelor of Science degree in Mechanical Engineering from M.I.T. and a Master of Science degree in Industrial Management from Stevens Institute of Technology. Prior to joining TMI, Mr. Scarborough was associated with Peat, Marwick, Livingston & Co. as the Partner who directed the firm's national management science consulting practice. He has directed and performed many assignments involving the application of advanced management science and computer techniques to a wide range of practical problems in both government and commercial applications.

Recently, Mr. Scarborough directed a team of consultants in the design and development of a computer-based model used in planning educational programs.

Carl V. Swanson

Mr. Swanson received the degrees of Bachelor of Science in economics and electrical engineering and Doctor of Philosophy in management from M.I.T. He teaches the basic course in Industrial Dynamics at the Sloan School of Management, M.I.T. His research and consulting activities have been directed at the analysis of large, complex systems. He has developed computer planning models for the evaluation of alternative planning strategies and for policy decision-making in the administration of educational programs of two-year colleges. This latter model, which was built utilizing Industrial Dynamics' techniques, focuses on the analysis of occupational needs and the design of programs to meet these needs.

C. Wade Tambor

Mr. Tambor, TMI's Executive Vice President, holds the degree of Bachelor of Arts in economics from Occidental College and the Master of Business Administration degree from Stanford University. Prior to joining TMI as one of its founding principals, Mr. Tambor was Managing Partner of Peat, Marwick, Livingston & Co. This international management and technical consulting firm of more than 200 professional personnel provided industrial management consulting services throughout the United States and abroad. Mr. Tambor has personally prepared and conducted many

seminars on program management, planning, programming, budgeting, manpower planning, and other management systems for industrial clients and for federal, state, and local public agencies as well. He has also participated in the development of planning capabilities for colleges and universities, including the application of computer-assisted and model-based techniques.

Bill B. Wills

Mr. Wills holds the degree of Bachelor of Arts in economics from T.C.U. and a Juris Doctor degree from the University of Texas. For the past 15 years, he has held responsible managerial positions in large, advanced technology-based industrial firms. One project, during this time, for which he was directly responsible, was the business management of an industry-conducted vocational training program for armed services personnel. Recently, he conducted an analysis of vocational training requirements for armed services electronics personnel in a large Middle East country.

Technology Management Incorporated

Technology Management Incorporated was formed in 1969 by persons with a depth of experience in project planning and management, systems engineering, management systems design and development, management information systems, advanced computer-based techniques, and management consulting. One of their common interests was dissatisfaction with traditional means by which advanced management approaches and techniques are applied in organizations in a way that is practical and useful.

Institutional growth is increasingly dependent upon management's willingness and ability to take the initiative for change—in organization, methods, and management technology. The need for applied technology is growing faster than it can be filled. Technology is, at the same time, growing faster than it can be effectively applied. TMI was organized to bridge this gap between technology and its practical application.

TMI has established close working relationships with the university community, a continuing source of innovation. Faculty members from leading schools of management are

involved in TMI-sponsored and staffed programs of continuing education, applied research and development, and other client-related activities.

TMI's professional staff is experienced in application of new developments in information systems, management science, computer technology, behavioral science and other areas. Staff members are dedicated to the effective use and control of these methods in private concerns and government organizations whose managements have taken the initiative for change. TMI's activities are directed toward expanding the capability of these organizations to implement new techniques. Their ultimate aim is to assure that effective, proven techniques and systems are fashioned appropriately for the tasks to be accomplished and are embedded in organizations so that responsible managers can multiply their personal effectiveness many times over.

Appendix D

INSTITUTE SCHEDULE

To provide flexibility, the following schedule was distributed in three parts, covering the first week, Sunday evening through mid-Wednesday; the first week, mid-Wednesday through Friday; and the second week, Monday through Friday.

MANAGEMENT INSTITUTE FOR EXPERIENCED OCCUPATIONAL
EDUCATION AND MANPOWER TRAINING ADMINISTRATORS

Pre-Institute Preparation

Marketing Myopia (article)
How To Define Administrative Problems (article)
Can You Analyze This Problem? (article)

MONDAY January 11, 1971

PROBLEMS AND NEEDS

9:00 AM Introduction

9:30 AM Group Preparation
Can You Analyze This Problem?

10:00 AM Discussion

Problem Definition
Can You Analyze This Problem?

10:45 AM Coffee

11:00 AM Presentation and Discussion

Classifying Problems and Needs

11:45 AM Workshop

Problem Definition and Classification

12:30 PM Lunch

1:45 PM Review and Discussion

2:00 PM Workshop (Continued)

3:00 PM Coffee

3:15 PM Group Presentations and Discussion

Problem Definition and Classification

4:00 PM Presentation and Discussion

Proposed Approach to Problem Analysis and
Problem Solving

4:45 PM Presentation of Evening Workshop Assignment

5:15 PM End of Afternoon Session

Evening Workshop

Defining the System To Plan for Structural Change

TUESDAY	January 12, 1971
9:00 AM	Group Presentations and Discussion <u>Defining the System To Plan for Structural Change</u>
10:30 AM	Coffee
10:45 AM	Presentation and Discussion <u>The Process of System Definition and Analysis</u>
11:30 AM	Discussion <u>Planning for Effective Adaptation to Funding Changes</u>
12:30 PM	Lunch
1:45 PM	Presentation and Discussion <u>Problems and Techniques in Forecasting Manpower Needs</u>
2:15 PM	Presentation and Discussion <u>Forecasting Manpower Needs With Available Data</u>
3:00 PM	Coffee
3:15 PM	Presentation and Discussion (Continued)
4:00 PM	Presentation and Discussion <u>Survey Techniques</u> Development of Career Opportunities for Biomedical Equipment Technicians, Interim Report II
5:00 PM	Presentation of Evening Workshop Assignment
5:15 PM	End of Afternoon Session
Evening	Workshop <u>Forecasting Manpower Needs in an Occupation</u>

WEDNESDAY January 13, 1971

9:00 AM Discussion of Workshop Results
Forecasting Manpower Needs in an Occupation

9:45 AM Presentation and Discussion
Ways of Coping with Uncertainty in Forecasts of Manpower Needs

10:30 AM Coffee

10:45 AM Presentation
Simulation

11:15 AM Workshop
Manual Simulation of a Training Program

12:30 PM Lunch

1:45 PM Presentation and Discussion
Computer Simulation of a Training Program

2:45 PM Introduction and Preview of Seminar Segment on PROGRAMS, Scheduled from 2:45 Wednesday, January 13, through Monday, January 25.

MANAGEMENT INSTITUTE FOR EXPERIENCED OCCUPATIONAL
EDUCATION AND MANPOWER TRAINING ADMINISTRATORS

PROGRAMS

WEDNESDAY January 13, 1971

2:45 PM Review and Introduction/Preview of Institute
Segment on PROGRAMS

3:15 PM Coffee

3:30 PM Workshop

Gap Identification and Goal Formulation

4:30 PM Presentation and Discussion of Workshop
Results

5:15 PM End of Afternoon Session

Evening Computer-Assisted Educational Planning
Demonstration

Individual Preparation (Optional-depending on
individual interests)

- . "What is PPB?" (Reading)
- . "PPB Note I. Answering the Question: Is an
Integrated Planning, Budgeting System Useful
for Our Jurisdiction?" (Reading)
- . "Excerpts from Budgeting, Managing and Control-
ling State Expenditures: ... A New Program-
Based System for Massachusetts" (Reading)

THURSDAY	January 14, 1971
9:00 AM	Presentation and Discussion <u>The Elements, Concepts, and Applications of PPBS</u>
10:15 AM	Coffee
10:30 AM	Workshop <u>Establishing Program Structure, Output Measures, and Organizational Relationships</u>
11:30 AM	Group Presentations and Discussions <u>Establishing Program Structure, Output Measures, and Organizational Relationships</u>
12:30 PM	Lunch
1:45 PM	Individual Preparation Office of Economic Opportunity (A)
2:30 PM	Discussion <u>Program Analysis and Evaluation</u> Office of Economic Opportunity (A)
3:15 PM	Coffee
3:30 PM	Discussion (Continued)
4:30 PM	Presentation and Discussion <u>Types, Levels, and Uses of Program Analysis</u>
5:15 PM	End of Afternoon Session
Evening	Individual Preparation . "Achievement Motivation Can be Developed" (Article) . "Excerpts from Note 11: A First Step to Analysis: The Issue Paper" (Reading) . "Systems Analysis in the War on Poverty" (Reading) . Action Planning

FRIDAY

January 15, 1971

9:00 AM

Review and Discussion

Planning, Programming, Budgeting Systems

9:30 AM

Workshop

Developing a Plan for Program Analysis

Excerpts from Note 11: The Issue Paper...

10:30 AM

Coffee

10:45 AM

Presentation and Discussion

Motivational Concepts in Education and Training
Program Design

Achievement Motivation Can be Developed

12:30 PM

Lunch

1:45 PM

Presentation and Discussion

Preview, Plans, and Preparation for the Second Week
of the Institute

4:00 PM

End of First Week Session

MANAGEMENT INSTITUTE FOR EXPERIENCED OCCUPATIONAL
EDUCATION AND MANPOWER TRAINING ADMINISTRATORS

MONDAY January 25, 1971

PROGRAMS

10:00 AM Problem Analysis and Planning

11:00 AM Coffee

11:15 AM Problem Analysis and Planning (Continued)

12:30 PM Lunch

1:45 PM Program Evaluation

"Office of Economic Opportunity (A)"

"Systems Analysis in The War on Poverty"

3:30 PM Coffee

3:45 PM Program Funding

5:15 PM End of Afternoon Session

Evening Individual Preparation

"Twin City Trust Company"

"Who Works with Whom?"

TUESDAY January 26, 1971

MANAGEMENT

9:00 AM	Introduction: "Twin City Trust Company"
10:15 AM	Coffee
10:30 AM	Approaches to Organization
11:30 AM	Project Planning Techniques
12:30 PM	Lunch
1:45 PM	Management Information Systems
3:30 PM	Coffee
3:45 PM	Management Information Systems (Continued)
5:15 PM	End of Afternoon Session
Evening	Panel Discussion: Measuring Education/ Training Accomplishment

WEDNESDAY January 27, 1971

9:00 AM Organizational Analysis Laboratory

10:30 AM Coffee

10:45 AM Organizational Analysis Laboratory (Continued)

12:30 PM Lunch

1:45 PM Motivation and Organization Climate
 "The Dynamics of Achievement Motivation"

3:30 PM Coffee

3:45 PM Motivation and Organization Climate (Continued)

4:15 PM Managerial Style: Its Effect on Organizational
 Climate

5:15 PM End of Afternoon Session

Evening Individual Preparation

 "How to Deal with Resistance to Change"
 by Paul R. Lawrence

 "A More Effective Use of Time"
 by Joseph M. Trickett

 "Planned Change"

THURSDAY January 28, 1971

9:00 AM The Process of Planned Change

10:30 AM Coffee

10:45 AM Initiating and Maintaining Planned Change

12:30 PM Lunch

1:45 PM Personal Managerial Planning

3:30 PM Coffee

3:45 PM Personal Managerial Planning (Continued)

5:15 PM End of Afternoon Session

Evening Individual Preparation
 Plan of Action

FRIDAY January 29, 1971

ACTION

9:00 AM Anticipating Obstacles to Change

10:30 AM Coffee

10:45 AM Plan of Action Development

12:30 PM Lunch

1:45 PM Summary and Evaluation

4:00 PM End of Institute

Appendix E

MATERIALS PROVIDED TO INSTITUTE PARTICIPANTS

The following materials were provided to participants before, during, or after the Institute, as indicated, to provide a basis for discussion and workshop assignments. Items designated "(Feedback)" were participant-developed presentations which were drafted and distributed during the Institute.

Advance Preparation

Memorandum: Institute Schedule and Arrangements

"Marketing Myopia" by Theodore Levitt

"How To Define Administrative Problems" by Richard L. Larson

Administrative Details

List of Participants

Schedule: Monday through Wednesday A.M.

Preparation for Monday Morning

"Can You Analyze This Problem?" by Perrin Stryker

Monday (Day One)

A Model for Problem Solving and Decision Making

Workshop Assignment: Problem Definition and Classification

(Untitled) Reproduced Workshop Presentations (Feedback)

Workshop Assignment: Defining the System to Plan for Structural Change

- . Unit Summary

- . "New Nixon Interest in Vocational Education,"
Boston Sunday Globe, December 27, 1970

- . Excerpt from Wall Street Journal, December 29, 1970

- . "The Massachusetts Comprehensive Manpower Plan FY 1971" (Excerpts)
- . "Projected Changes in Total Employment 1960 to 1975"

Reproduction of Four "System Definition" Presentations (Feedback)

Tuesday (Day Two)

Workshop Assignment: Forecasting Manpower Needs in an Occupation

- . Unit Summary (II)
- . "State Plan for the Administration of Vocational Education" (Excerpt)
- . "Tomorrow's Manpower Needs, Volume I, Developing Area Manpower Projections," Appendix A, U. S. Department of Labor
- . "State MDTA Plan for Institutional Training FY 1971" (Excerpts)
- . "Statewide Survey of All Job Openings Unfilled on February 28, 1969, in the Massachusetts State Employment Service" (Excerpts)

"Development of Career Opportunities for Biomedical Equipment Technicians, Interim Report II," Technical Education Research Center

Annotated Bibliography of Data Sources for Forecasting Job Opportunities and the Universe of Need for Occupational/Manpower Training (including Annotated Bibliography of Publications on Economic Projections)

Wednesday (Day Three)

Workshop Assignment: Manual Simulation of a Training Program

- . Computer Printout (Untitled)

Schedule: Wednesday P.M. through Friday

Thursday (Day Four)

"What is PPB?" (5-5-5 Project)

"PPB Note 1: Planning, Programming, Budgeting for City, State, County" (5-5-5 Project)

Excerpts from "Budgeting, Managing, and Controlling State Expenditures: A New Program-Based System for Massachusetts" (OPPC - MSU)

Foster Home Care in the Context of a Program Structure (Excerpt)

Reproductions of "Gap Analysis" Presentations (Feedback)

Friday (Day Five)

Excerpts from "Criteria for Evaluation in Planning State and Local Programs" (5-5-5 Project)

Assessing Effectiveness - Excerpts from the Institute Questionnaire

Excerpts from "Note 11: A First Step to Analysis: The Issue Paper" (5-5-5 Project)

"Achievement Motivation Can Be Developed" by David C. McClelland

Monday (Day Six)

Schedule: Week Two

Institute-Related Activities Planned for January 18-22, Summary Statements

Outline of an Issue Paper

"Office of Economic Opportunity (A)" (Case Study)

"Systems Analysis in the War on Poverty" by Robert A. Levine

"Letter of Intent to Submit a Proposal to Design, Develop, and Implement a Management Information System"

"OE Form 4314"

Tuesday (Day Seven)

"Twin City Trust Co." (Case Study)

"Who Works with Whom?" by David I. Cleland and Wallace Munsey

Wednesday (Day Eight)

"The Dynamics of Achievement Motivation" (Workshop)

T-P Leadership Questionnaire

Managerial Grid

"How to Choose a Leadership Pattern" by Robert Tannenbaum
and Warren H. Schmidt

Thursday (Day Nine)

"Planned Change" (Workshop)

"How to Deal with Resistance to Change" by Paul R. Lawrence

Excerpts from "An Analysis of Major Scheduling Techniques
in the Defense Systems Environment," the Rand Corporation

"Guest Editorial" by Andrew Vazsonyi

Friday (Day Ten)

"A More Effective Use of Time" by Joseph M. Trickett

. Activity Analysis (Worksheets)

. Three-Month Planning Calendar

Plan of Action (Worksheet)

Materials Distributed Following the Institute

Memorandum: Enclosed Certificate and Materials

- . "Skills of an Effective Administrator" by Robert L. Katz
- . Institute Bibliography
- . Certificate of Completion

Appendix F

INSTITUTE BIBLIOGRAPHY

This bibliography lists useful materials relating to areas covered in the Management Institute. It emphasizes materials not typically found in education or manpower sources. It does not repeat the separate references for forecasting and program budgeting which were included in the Institute materials. Items marked with an asterisk were among the materials distributed during the Institute.

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Appendix G

PARTICIPANTS IN MANAGEMENT INSTITUTE FOR EXPERIENCED OCCUPATIONAL EDUCATION AND MANPOWER TRAINING ADMINISTRATORS

*Laurence Babin, Director	Quincy Vocational High School Woodward Avenue Quincy, Massachusetts 02169 472-1568
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*Denotes participants who completed full two weeks

G.1

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Appendix H

NOTES TAKEN FROM PARTICIPANT POST-INSTITUTE INTERVIEWS

Participant 1: Superintendent-Director of Regional Vocational School

- . Generally more aware of inefficiencies and possible diffusion of responsibility in his own job and in his organization as a whole; perceives potential corrective action in a broader framework with more alternatives.
- . Discussed PPBS and computerized management information systems with his data processing manager; assigned followup planning for a total system.
- . Assigned his secretary the task of gathering all of the organization's job descriptions preparatory to reviewing and assessing current assignments in view of organizational growth.
- . Generally has "sharpened mind" on what is really important, particularly in the management versus educational aspects of his job.
- . Increased understanding of tasks and problems of other kinds of administrators, helping him in conducting and building relationships.
- . Helped to integrate much formant past experience into his present job situation (e.g., in areas such as budgeting time); gained a new perspective.

Participant 2: Superintendent-Director of Regional Vocational School Under Construction

- . Improved his decision-making approach by paying more attention to the specification and assessment of alternative solutions to the problems and emphasizing the importance of validation information in the evaluation of alternatives.
- . Improved his ability to recognize problems that need solving; recently conducted a comprehensive problem analysis, utilizing the Institute's midweek problem analysis format.

Participant 3: Superintendent-Director of Regional Vocational School Under Construction

- . Became painfully aware of the problems of managing his time because of a special project that is consuming a large portion of each day; is finding that he must manage the rest of his day very carefully to maintain effectiveness.
- . Has started using a logical thinking process in the definition and solution of problems; believes that he is spending proportionally too much time in the problem-solving process rather than in the problem-finding process.
- . Developed the preliminary portion of an overall comprehensive project plan for all tasks needed to open his new school. Included in this plan was an overall schedule overview for the next two years, an organizational plan including job descriptions and the roles and responsibilities of the key administrator, manning requirements, etc. On the basis of this plan, his advisory board gave him approval to begin hiring key staff personnel earlier than he had originally expected. He has distributed this plan to other administrators who are in process of establishing new schools and has received favorable feedback on his approach. Also as a result of this plan, a special planning subcommittee was formed within his advisory board to work with him directly in further planning and implementation.
- . On the basis of the introduction to computer-assisted planning during the Institute, is in the process of defining specific requirements for a computerized scheduling system to be used for the scheduling of 1,700 day students and 5,000 evening students, 150 instructional staff members, and all facilities; is considering the use of individualized scheduling in time increments as short as 10 minutes.

Participant 4: Director of Vocational School in Large City

- . Rewrote a piece of Institute materials concerned with relationships among members of a management team and tailored it to his own organization; used this material as a basis for initiating, among his staff, the consideration of the nature of and improvements in working

relationships; specifically, progressed in plan-of-action item, working "toward the involvement of vocational-technical school staff in a study of the process of change."

- . Initiated "steps to involve the vocational-technical school advisory committee in program planning" (plan-of-action item); believes this committee has been "rubber stamping" and is not an active force in shaping and changing the school's program; addressed this question directly in a committee meeting conducted since the Institute, asking the committee to reconsider their role and seeking to motivate them to take a "real interest in the concerns of the school."
- . Changed his own thinking, as well as that of his staff and other school officials, about the proper approach to a scheduling problem; organized the logic of the approach to consider program goals first, scheduling mechanics second.
- . Through library research, pursued further the study of time management and priority setting.
- . Generally changed his outlook both in his ways of thinking about the organization and its problems and in the approach and format used in addressing specific problem situations. Specifically:

"I have a broader perspective. I now look outward at the total system rather than inward or at just the vocational school."

"In any problem situation, I think in terms of the models and readings discussed at the Institute as a stepping-off point...gives me methods...I do not become so anxious, and I have a more confident approach."

"I am conscious of a trait toward preoccupation with 'people problems.' The Institute has helped me see the broader picture and to avoid obscuring the underlying technical problems."

"I have used motivation concepts which brought into focus the means of defining motivation in individuals and what I can do to increase involvement through better motivation of staff...less 'contract consciousness'."

- . In response to a request from his superintendent, prepared a brief report on the Institute and the kind of questions that it raised for him. This report, which later was distributed to all administrators in the school system, is included in Exhibit H-1.

Participant 5: Director of Vocational School in Large City

- . Will develop a PERT network plan for his forthcoming move to a new building.
- . As a result of the systematic analysis models coverage, is better able to understand and think through the current effort to convert vocational curricula to modular units.
- . Plans to continue examining management of time problems and to undertake a thorough time analysis and planning exercise.
- . Perceives the Institute as useful in dealing with his plan-of-action item, "the problem of creating a comprehensive occupational system in the high school setting."
- . Received many intangible benefits ("things I did not expect") through contact with managers in manpower and other fields; finds joint meetings of vocational and manpower administrators more meaningful and useful as a result.
- . Foresees additional applications following his usual custom of reviewing training materials and notes during the summer ("after experience has settled in").

Participant 6: Superintendent of Vocational School System in Large City

- . Is using "time management" concepts and methods to control interruptions; circulated this material to key staff members.
- . Took steps to more effectively introduce change in a manner that people will accept, working through key subordinates and using circulation of Institute materials as one device. This has helped in pursuing a plan-of-action item developed partly as a result of the

Exhibit H-1

SUBJECT: Report #4. Review and report on two-week management institute and implications for implementation in the Vocational-Technical School and the School System.

An institute of this type can be of inestimable benefit to the participant who must have a knowledge of models and techniques that may be applied to the problem of managing a complex organization. As the institute progressed, I found myself constantly finding situations and problems within the Vocational-Technical School and the school system analagous to the problems of industry. Through the problem analysis and organizational analysis models, problems which formerly brought on a sense of dilemma now appear to take on some manageable dimensions. As we took a new look at ourselves, our problems, and our organization, I began to formulate some questions about myself and my role as the "manager" of the Vocational-Technical School. As you will see by the following list of questions, I see my role not only in terms of "the Vocational-Technical School", but as an agent for the development of occupational education opportunities in the public school system. The list of problems is by no means exhaustive. I am aware that there are existing and emerging problems. The list merely emphasizes some of my concerns and may express some of yours.

(Not listed according to priority)

Where do I see or sense a need for change?

1. How can the "Advisory Committee" become more involved in curricula revision?
2. How can we expand the involvement of staff in curricula revision?
3. How can we involve students in curricula revision?
4. What procedures may we initiate to reduce resistance to curricula change and implementation?

Exhibit H-1 (Con't.)

5. I wish to establish closer, more definable relationships with local industry.
6. Post-high programs seem to lack any sense of cohesiveness or commonality. We need a study of these independent operations with their separate diplomas, etc.
7. How can I involve the Assistant Superintendent for Instruction in our activities or curriculum planning?
8. Is the Assistant Principal of the Vocational-Technical School under-employed?
9. What should be the role of the two shop supervisors?
10. How can I involve the community at large for support of expanding needs?
11. Should we change directions in some programs; i.e., emphasize different aspects of the curricula goals?
12. How can we develop a system-wide awareness of the commitment to develop curricula in behavioral terms?
13. How can I initiate a re-commitment to the need to study the process of change?
14. How can I allocate my time to permit me time to address myself to larger problems?
15. How best may I divide the labor among my staff?
16. How can I assist in making some people in a supervisory capacity more acceptable to the rest of the staff?

Exhibit H-1 (Con't)

17. Have I a thorough understanding of each staff person's responsibilities?
18. Do I really know the degree of interest of the staff in our goals?
19. What can I do to better understand the thought processes of the guidance departments in the high schools and junior high schools?
20. What can we do for students rejected because of lack of space?
21. What programs may we develop for high school enrollees?
22. How can I sell our facility and programs to the students and the community?
23. Where has the most "change", either positive or negative in terms of the system's goals occurred? If analyzed, could I benefit from understanding what has occurred? Can I find out what has occurred?

Institute. ("I intend to take some action, other than the pyramidal staff reports and memos, designed to get my immediate subordinates to interrelate and thus complete projects without the delay and uncertainty of having to always get approval from me for every action.")

- . Is applying concepts of motivation and performance to accomplish a second plan-of-action item. ("I expect to take action in determining rewards other than money, security, promotion, etc., to create better personal interest from the staff toward the aims and philosophy of the department.")
- . Circulated notes taken during Institute lectures and discussions and is communicating more information about the organization's objectives, costs, and problems to the staff during meetings to gain their involvement and increased understanding.
- . Is engaged in continuing self-analysis about relative personal orientation toward "tasks" versus "people" and the effect of this on subordinates.
- . Used some (and plans to use other) relationships developed with other participants to improve relationships and coordination among organizations.

Participant 7: Director of Vocational School in Small City

- . Made progress toward developing an improved image for vocational education within his school system.
- . Sees the need for formalizing the management function; is looking for support from his school committee for upgrading the management of his part of the system; sees an advantage in terms of justifying his programs at town meeting by emphasizing improved management (a plan-of-action item).
- . Developed more confidence in himself and what his organization is doing; has indicated that the Institute helped him realize that his problems are not unique and that he can develop approaches to solving problems through interactions with people such as the Institute participants; found people from similar levels at the Institute helpful in looking at his own responsibilities.

- . Recently made a presentation to four school superintendents in his general area related to possibilities for developing a regional school consortium; followed problem analysis and program planning concepts and formats presented at the Institute to form his presentation. The reception he received for his ideas was beyond his expectations, and he credits what he learned at the Institute for helping him.
- . On the basis of both systems analysis and computer-simulated planning exercises, has developed a better understanding of the interrelationships of demand created by emerging occupations and of curriculum design requirements and changes.
- . Established a special study committee to analyze and plan new programs; credits the Institute with giving him ideas in how to proceed with this activity (plan-of-action item). This committee, which has been meeting monthly since the Institute, is made up of people from his staff and faculty as well as people from industry. Initial sessions stressed team building and goal setting using Institute techniques. Initially, this group is examining the demand and program requirements for health-care concentrations.
- . In line with his goal of establishing a better organizational system, has undertaken an organizational analysis and development effort, is utilizing techniques presented at the Institute for organizational analysis and development, including a complete sociogram describing communication patterns within his staff and between his organization and the rest of the system. (A sample form is shown in Exhibit H-2.) His personnel have become enthusiastic about this project. He has expressed great interest in this approach to organizational analysis and is considering systemwide use of these techniques (a plan-of-action item).
- . Has become much more sensitive to the overall process of measuring organizational performance and effectiveness; is expanding the concept of performance measurement to include internal measures of how well his organization is doing as well as external measures from his superintendent, the school committee, and the "outside world."

Exhibit H-2
SELF EVALUATION - COMMUNICATIONS

SEE DIRECTIONS
ON PAGE 2

VALUE	CONCERN		DIRECTION
E	⊖	SUPERINTENDENT	←
E	⊖	ASSOC. SUPERINTENDENT	↔
G	⊕	ASST. SUPERINTENDENTS	↔
NA	○	SCHOOL COMMITTEE	—
G	⊕	DIRECTOR	↔
G	⊕	COORDINATOR	↔
NA	○	DEPT. HEAD	—
E	○	SHOP INSTRUCTOR (your dept.)	→
G	⊖	RELATED INSTRUCTOR (your dept.)	↔
G	⊖	ACADEMIC INSTRUCTORS	↔
E	⊖	VOCATIONAL GUIDANCE	←
E	○	VOCATIONAL STUDENTS	↔
E	○	ALUMNI	↔
G	⊖	ADVISORY BOARD	↔
E	⊕	STUDY COMMITTEE	↔
G	○	GENERAL PUBLIC	↔
G	⊖	OTHER VOCATIONAL DEPT.	↔
NA	○	TRADE ASSOC. (trade organizations)	—
NA	○	PLACEMENT	—
E	⊕	STATE DEPT.	↔
G	⊕	SECRETARIAL STAFF	↔
G	⊕	CUSTODIAN	↔
NA	○	JR. HIGH SHOP TEACHERS	—
NA	○	JR. HIGH GUIDANCE	—
NA	○	JR. HIGH PRINCIPALS	—

H.10

VALUE	CONCERN		DIRECTION
E	○	HIGH SCHOOL PRINCIPAL	← →
E	○	HIGH SCHOOL TEACHERS	← →
N.A.	○	HIGH SCHOOL GUIDANCE	—
E -	○	HIGH SCHOOL STUDENTS	← →
N.A.	○	I.M.C.	—

IN AN ATTEMPT TO IMPROVE OUR SCHOOL WE WOULD LIKE TO EVALUATE OUR COMMUNICATIONS WITH AN AIM IN MIND TOWARDS IMPROVING THEM. PLEASE TRY AND BE CRITICAL AND GIVE YOUR ANSWERS NOT WHAT YOU THINK THEY ARE LOOKING FOR. TURN IN ONE FORM COMPLETED TO THE OTHER IS YOURS.

IN COLUMN HEADED VALUE, RATE YOUR COMMUNICATION WITH THE PERSON OR PERSONS LISTED TO THE RIGHT. RATE THEM P - POOR, F - FAIR, G - GOOD, E - EXCELLENT
N.A. - NOT APPLICABLE.

IN COLUMN HEADED CONCERN, RATE WHAT YOU FEEL IS THE CONCERN OF THOSE ON THE RIGHT TO YOUR COMMUNICATIONS: ○ - NO CONCERN, ⊖ - SOME CONCERN
⊕ - CONCERNED

IN COLUMN HEADED DIRECTION SHOW WHICH WAY COMMUNICATION TRAVEL. → FROM YOU ← TOWARD YOU
← → BOTH WAYS.

H.11

Participant 8: Director of Vocational School in Large City

- . Has become much more sensitive to the problems and difficulties of introducing and managing change in organizations; senses a significant change in his attitudes regarding his own willingness to change; finds his dealings with the local campus organization to be more effective now than prior to the Institute; is emphasizing improved communications in his day-to-day activities with all groups with which he deals; instituted new techniques for communicating with teachers and students within the school.
- . Established an ad hoc planning committee for the introduction of changes in organizational activities; has been able to work more effectively with teachers, higher administrative officials, and the school committee in resolving various organizational issues.
- . Believes his problem-solving and decision-making have been improved since the Institute.
- . Has changed his attitudes regarding the purpose and goals of the entire educational process; believes he is more sensitive to the needs of the students as a client group.

Participant 9: Director of Vocational School in Large City

- . Helped him recognize invalid mixture of programmatic responsibilities and administrative reporting relationships in current organization structure; plans to modify.
- . Able to participate more effectively (and comfortably) in school system committees as a result of new familiarity with a range of management techniques.
- . Gained confidence through perceiving the formal rationale and methodology of many kinds of management practices that he has been "following all along."
- . Is attempting to analyze further and react to inter-relationships of general high school and vocational high school using a collaboration approach (plan-of-action item).

- . "Trying to balance personal traits of management from concern for people to concern for task or production" (plan-of-action item).

Participant 10: Director of Adult Programs in Vocational School in Large City

- . Utilized problem-solving approach on a step-by-step basis to resolve a chain of command problem with one of his staff. Undertook a comprehensive analysis of a problem in one of his training programs, utilizing the Institute format for the midweek assignment; was able to convince the personnel director of program effectiveness. Prior to undertaking this complete analysis, the training program was being considered for cancellation.
- . Has become very sensitive to the problem of time management. Although he still sees this as being a real problem, he has increased the amount of responsibility that he has delegated to his staff, and is taking other steps to change his habit of crisis management and immediate response to demands and requirements.
- . Credits the Institute with helping him to develop a solution to an interpersonal problem with one of his subordinates.
- . Instituted a series of staff bimonthly meetings during which the direction of the program is reviewed; uses group dynamics approaches to develop a sharing of responsibility for setting program direction with his subordinates; believes that sharing of responsibility has improved the programs by stimulating ideas that have reduced program dropouts and by upgrading communications within his staff. His group decision-making process was modeled after the planning process presented at Institute.
- . Developed an appreciation for the kind of responsibility orientation that he should provide to his staff when, as part of the Institute workshop, he provided task familiarization to an Institute participant. Prior to the Institute, he was confronted with a situation parallel to the workshop incident, and he had handled the situation ineffectively. Upon returning to work he brought the subject up again with the member of his staff and initiated corrective action.

H.13

TECHNOLOGY MANAGEMENT INCORPORATED

- . Developed two plan-of-action items: establishment of a more effective organization and establishment of a personal time management system.

H.14